CRJS180N80G2E

SJMOS N-MOSFET 800V, 145mΩ, 25A

Features

- CRM(CQ) Super_Junction technology
- Much lower Ron*A performance for On-state efficiency
- Better efficiency due to very low FOM
- Integrated ESD protection diode
- Qualified for industrial grade applications according to JEDEC

Product Summary

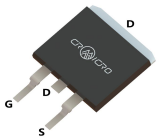
V_{DS}	800V
$R_{DS(on),typ}$	145mΩ
I_D	25A
ESD(HBM)	2000V

Applications

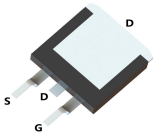
- LED/LCD/PDP TV and monitor Lighting
- Solar/Renewable/UPS -Micro Inverter System
- Charger
- Power Supply

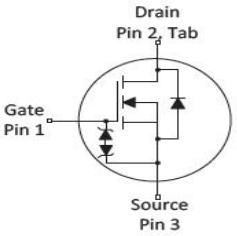
100% DVDS Tested
100% Avalanche Tested

Top view



Bottom view





Package Marking and Ordering Information

Part #	Marking	Package	Packing	Reel Size	Tape Width	Qty
CRJS180N80G2E	CRJS180N80G2E	TO-263	Tape&Reel	N/A	N/A	1000pcs

Absolute Maximum Ratings

Parameter	Symbol	Value	Unit
Drain-source voltage	V_{DS}	800	V
Continuous drain current [1)] T_C = 25℃ T_C = 100℃	I_D	 25 16	A
Pulsed drain current [2)] (T_C = 25℃, t_p limited by $T_{j,max}$)	$I_{D,pulse}$	99	A
Avalanche energy, single pulse (L=30mH)	E_{AS}	317	mJ
MOSFET dv/dt ruggedness	dv/dt	50	V/ns
Gate-Source voltage	V_{GS}	±30	V
Power dissipation (T_C = 25℃)	P_{tot}	278	W
Continuous diode forward current(T_C = 25℃)	I_S	25	A
Diode pulse current [2)] (T_C = 25°C)	$I_{S,pulse}$	99	A
Recovery diode dv/dt [3)]	dv/dt	50	V/ns
Operating junction and storage temperature	T_j , T_{stg}	-55...+150	℃

1) Limited by $T_{j,max}$. Maximum Duty Cycle D = 0.50
2) Pulse width t_p limited by $T_{j,max}$
3) Identical low side and high side switch with identical R_g

Thermal Resistance

Parameter	Symbol	Value			Unit	Test Condition
		min.	typ.	max.		
Thermal resistance, junction – case	R_{thJC}	-	0.32	0.45	℃/W	
Thermal resistance, junction – ambient	R_{thJA}	-	-	89	℃/W	

Electrical Characteristic (at T_j = 25 ° C, unless otherwise specified)

Parameter	Symbol	Value			Unit	Test Condition
		min.	typ.	max.		
Static Characteristic						
Drain-source breakdown voltage	BV_{DSS}	800	-	-	V	V_{GS}=0V,I_D=250μA
Gate threshold voltage	$V_{GS(th)}$	4	-	5	V	V_{DS}=V_{GS},I_D=250μA
Zero gate voltage drain current	I_{DSS}	- -	- 5	1 -	μA	V_{DS}=800V,V_{GS}=0V T_j=25℃ T_j=150℃
Gate-source leakage current	I_{GSS}	-	-	±10	μA	V_{GS}=±30V,V_{DS}=0V
Drain-source on-state resistance	$R_{DS(on)}$	- -	145 360	180 -	mΩ	V_{GS}=10V,I_D=12A, T_j=25℃ T_j=150℃
Transconductance	g_{fs}	-	15	-	S	V_{DS}=20V,I_D=12A
Dynamic Characteristic						
Input Capacitance	C_{iss}	-	2056	-	pF	V_{GS}=0V, V_{DS}=100V, f=1MHz
Output Capacitance	C_{oss}	-	70	-		
Reverse Transfer Capacitance	C_{rss}	-	0.77	-		
Gate Total Charge	Q_g	-	53	-	nC	V_{GS}=10V, V_{DS}=480V, I_D=12A
Gate-Source charge	Q_{gs}	-	17.0	-		
Gate-Drain charge	Q_{gd}	-	24	-		
Gate plateau voltage	$V_{plateau}$	-	7.2	-	V	
Turn-on delay time	$t_{d(on)}$	-	57	-	ns	V_{GS}=10V, I_D=12A, V_{DS}=400V, R_g=27Ω
Rise time	t_r	-	100	-		
Turn-off delay time	$t_{d(off)}$	-	160	-		
Fall time	t_f	-	57	-		
Gate resistance	$R_{g,int}$	-	5.7	-	Ω	f=1MHz

Body Diode Characteristic

Parameter	Symbol	Value			Unit	Test Condition
		min.	typ.	max.		
Body Diode Forward Voltage	V_{SD}	0.5	0.85	1	V	V_{GS}=0V,I_{SD}=12A
Body Diode Reverse Recovery Time	t_{rr}	-	412	-	ns	I_{SD}=12A di_F/dt=100A/μs V_{DS}=400V
Body Diode Reverse Recovery Charge	Q_{rr}	-	8.1	-	μC	
Body Diode Reverse Recovery Peak Current	I_{rrm}	-	37	-	A	

Typical Performance Characteristics

Fig 1. Output Characteristics (T_j=25℃)

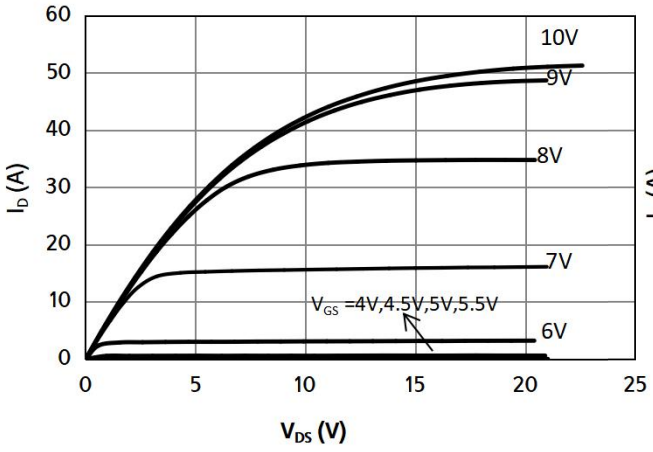


Fig 2. Output Characteristics (T_j=150℃)

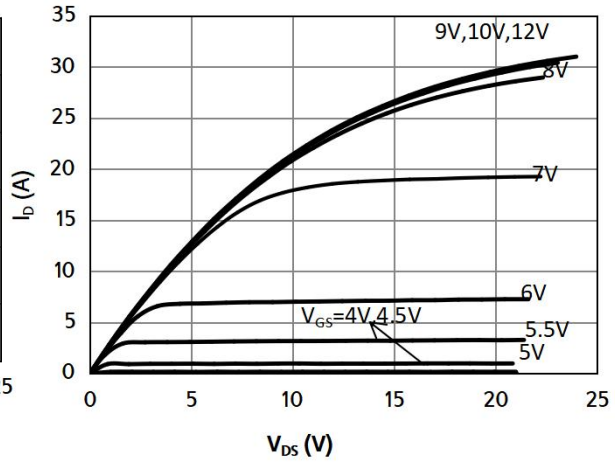


Fig 3: Transfer Characteristics

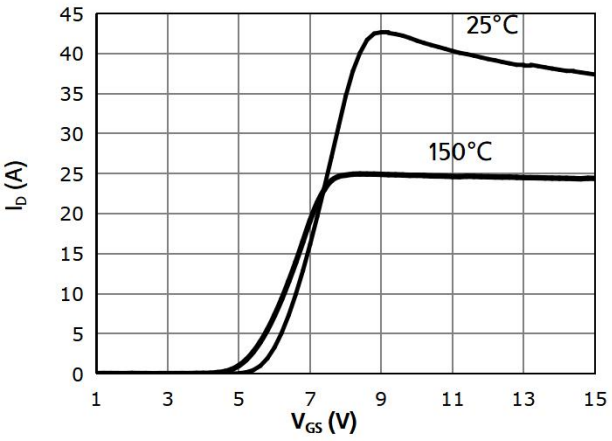


Fig 4: V_{TH} vs. T_j Temperature Characteristics

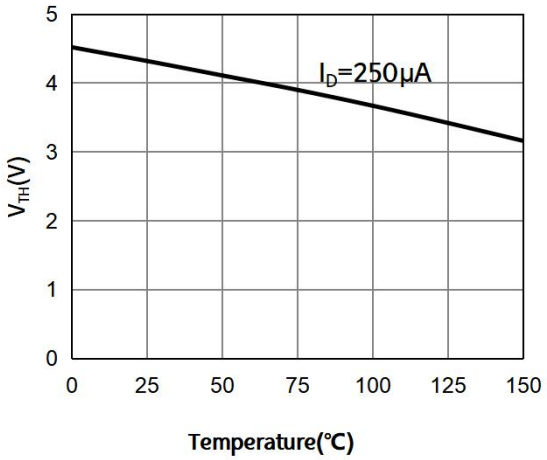


Fig 5: $R_{DS(on)}$ vs. I_{DS} Characteristics(T_j=25℃)

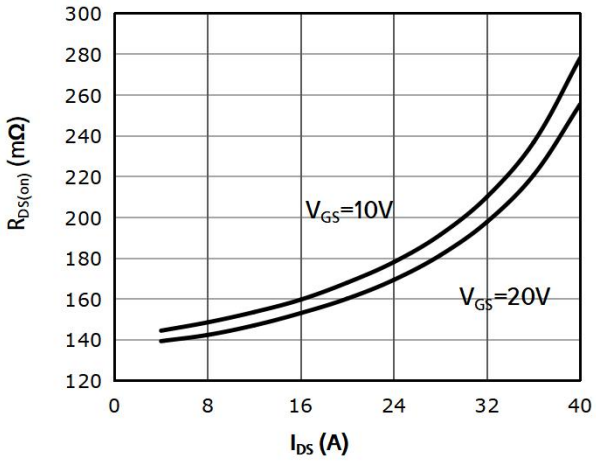


Fig 6: $R_{DS(on)}$ vs. Temperature

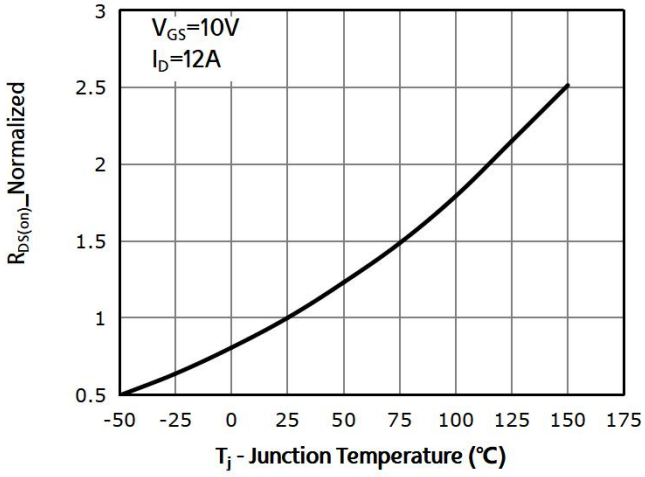


Fig 7: BV_{DSS} vs. Temperature

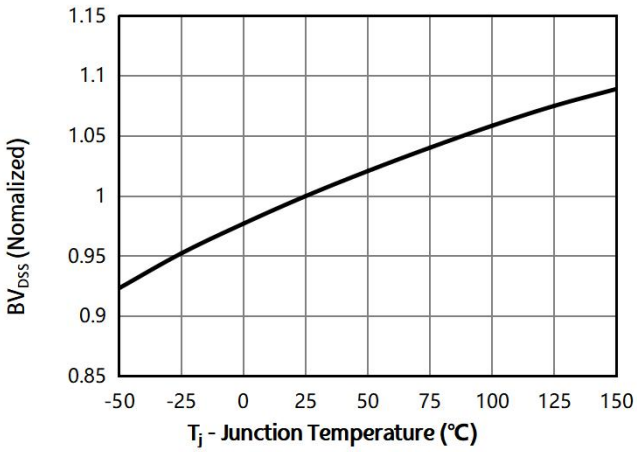


Fig 8: $R_{DS(on)}$ vs. Gate Voltage

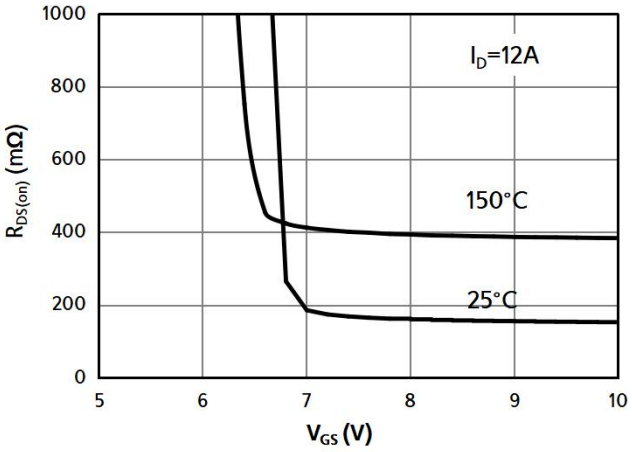


Fig 9: Body-diode Forward Characteristics

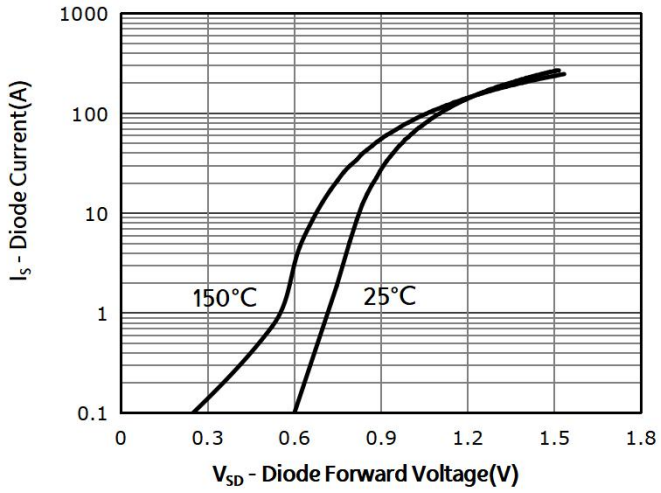


Fig 10: Gate Charge Characteristics

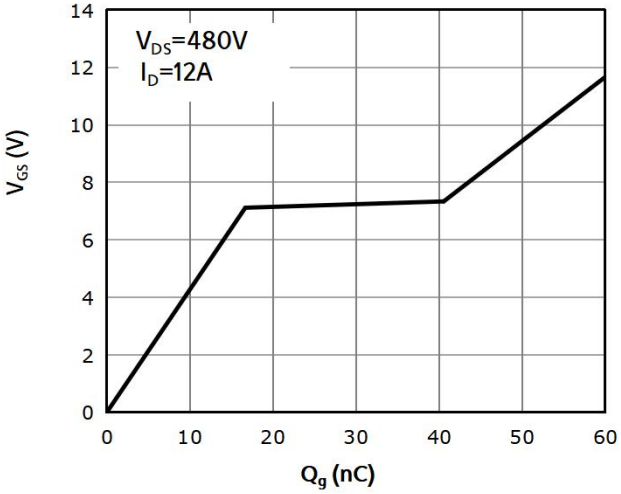


Fig 11: Capacitance Characteristics

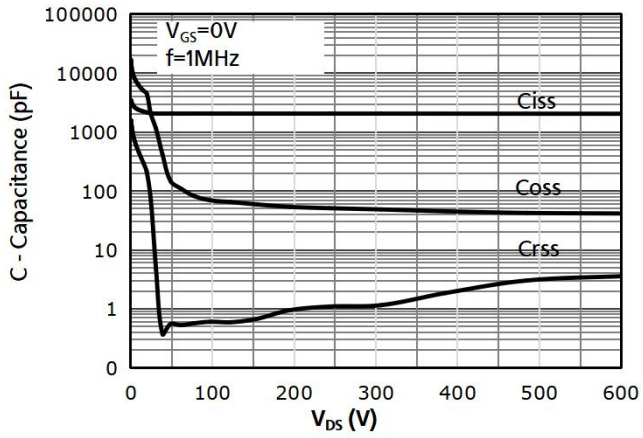


Fig 12: Safe Operating Area

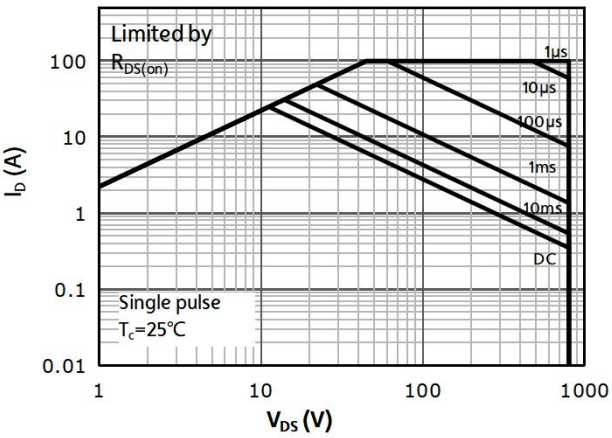
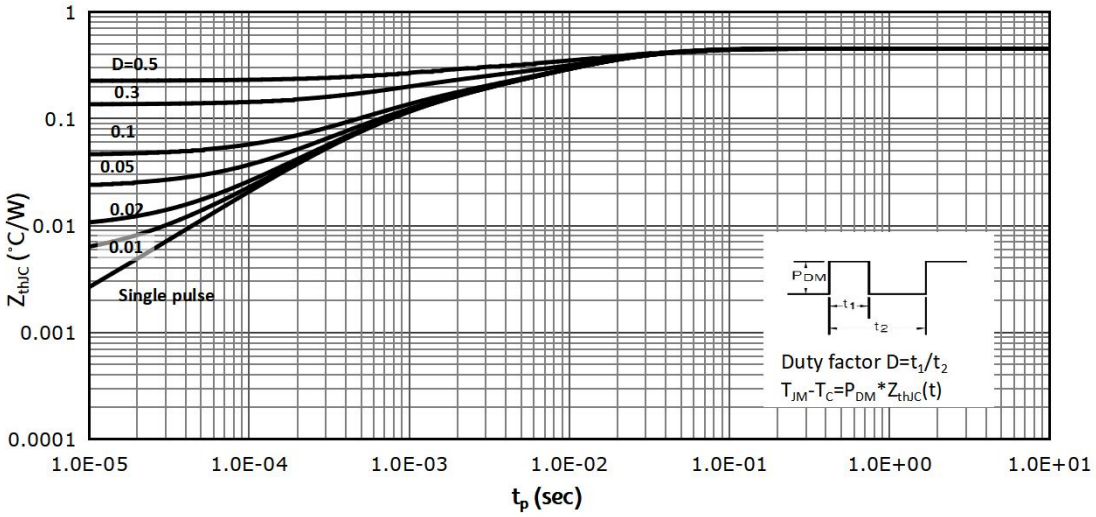
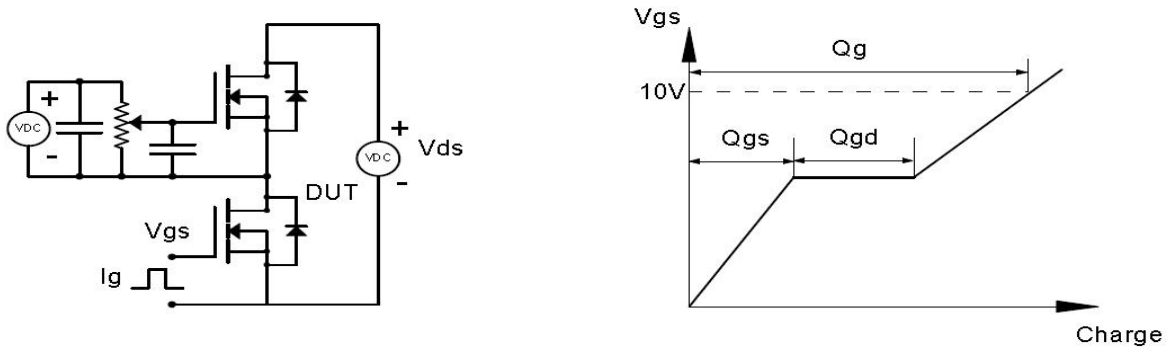


Fig 13: Max. Transient Thermal Impedance

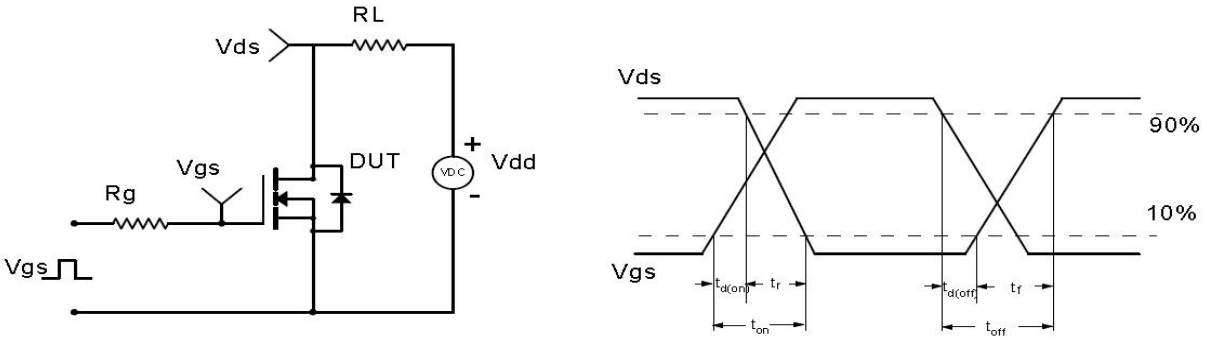


Test Circuit & Waveform

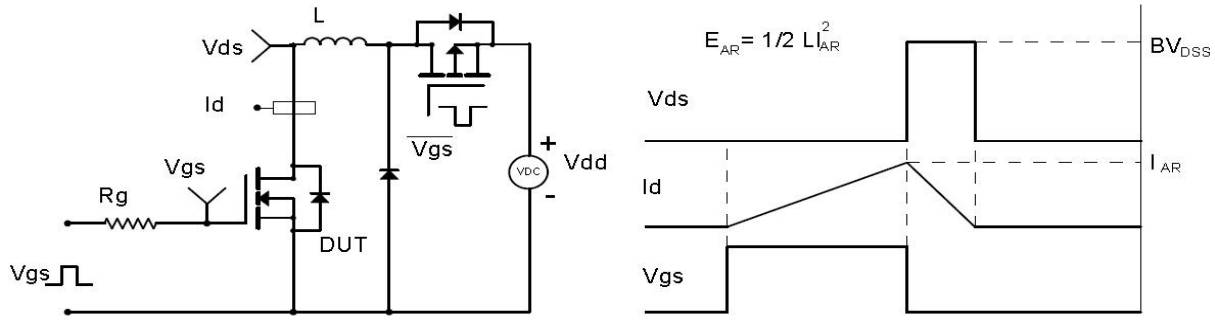
Gate Charge Test Circuit & Waveform



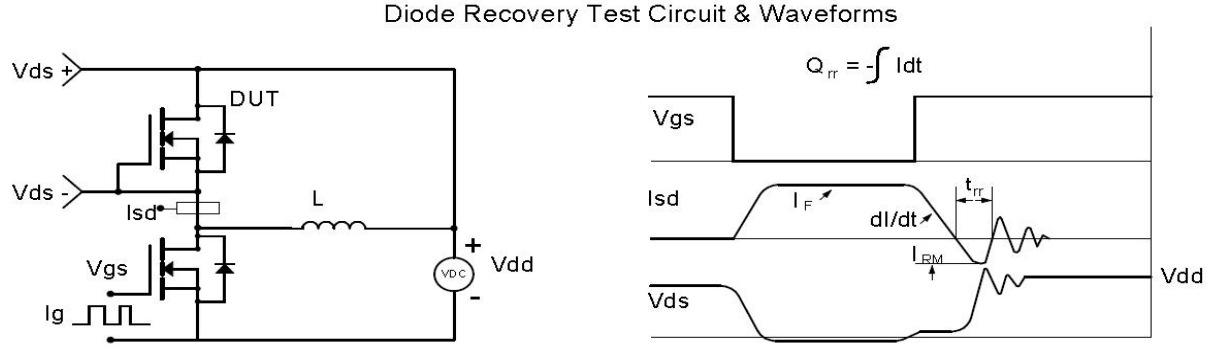
Resistive Switching Test Circuit & Waveforms



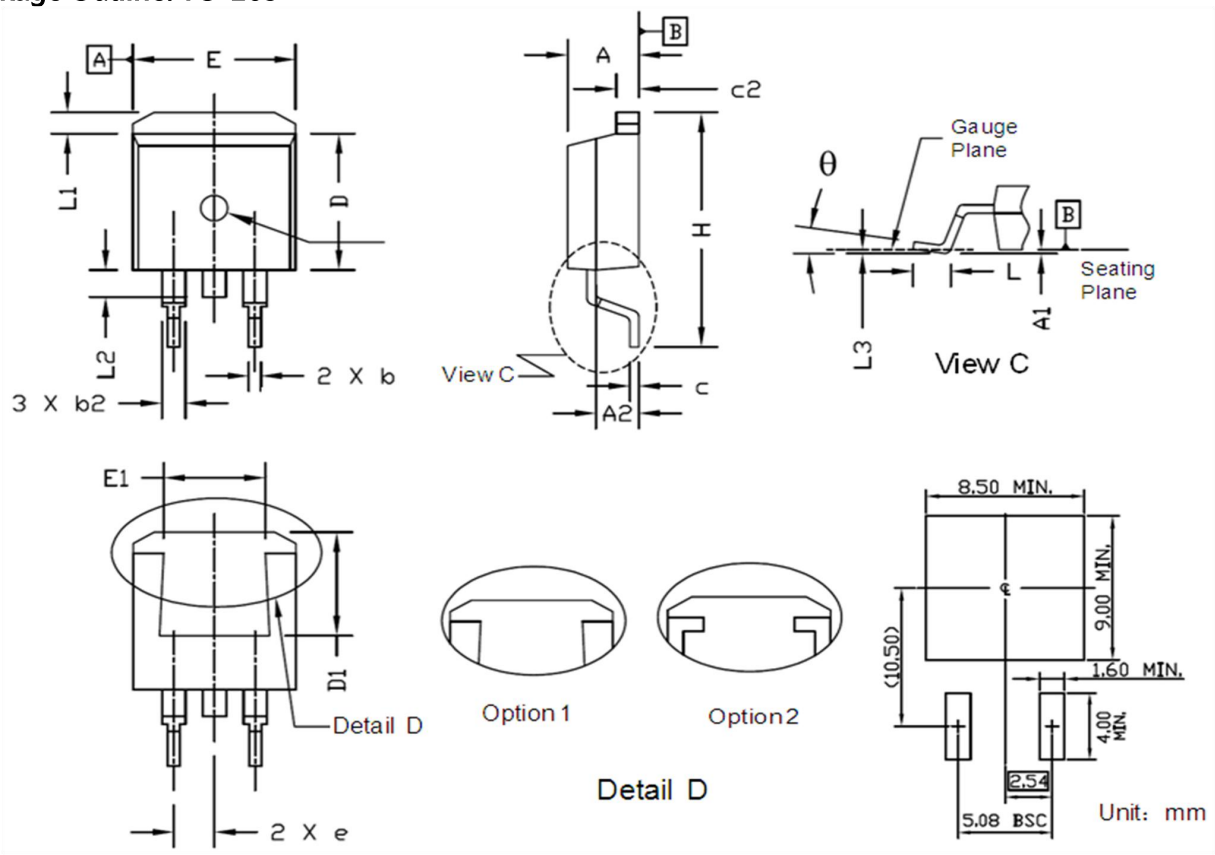
Unclamped Inductive Switching (UIS) Test Circuit & Waveforms



Diode Recovery Test Circuit & Waveforms



Package Outline: TO-263



Symbol		Dimensions In Millimeters		Dimensions In Inches	
		Min.	Max.	Min.	Max.
A		4.30	4.86	0.169	0.191
A1		0.00	0.25	0.000	0.010
A2		2.20	2.90	0.087	0.114
b		0.68	0.94	0.027	0.037
b2		1.14	1.78	0.045	0.070
c		0.33	0.65	0.013	0.026
c2		1.17	1.40	0.046	0.055
D		8.38	9.45	0.330	0.372
D1		6.90	8.17	0.272	0.322
e		2.54 BSC.		0.100 BSC.	
E		9.78	10.50	0.385	0.413
E1		6.50	8.60	0.256	0.339
H		14.61	15.88	0.575	0.625
L		1.78	2.79	0.070	0.110
L1		0.70	1.60	0.028	0.063
L2		1.00	1.78	0.039	0.070
L3		0.25 BSC.		0.010 BSC.	
θ	Option A	-8°	0°	-8°	0°
	Option B	0°	8°	0°	8°

Marking



NOTE:
NXBBAAAA

N	—WB code (Usually omitted)
X	—Assembly location code
BB	—Fab code
AAAA	—Lot code

Revision History

Revison	Major changes
2.0	Formal version
2.1	Update to new template

Disclaimer

Unless otherwise specified in the datasheet, the product is designed and qulified as a standard commercial product and is not intended for use in applications that require extraordinary levels of quality and reliability, such as automotive, aviation/aerospace and life-support devices or systems.

Any and all semicondutor products have certain probability to fail or malfunction, which may result in personal injury, death or property damage. Customer are solely responsible for providing adequate safe measures when design their systems.

CRM(CQ) reserves the right to improve product design, function and reliability without notice.

TC=25℃	VGS=4V	VGS=4.5V	VGS=5V	VGS=5.5V	VGS=6V	VGS=7V	VGS=8V

TC=125℃	VGS=4V	VGS=4.5V	VGS=5V	VGS=5.5V	VGS=6V	VGS=7V	VGS=8V

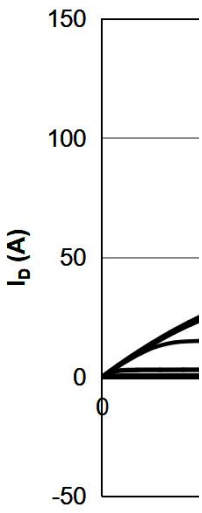
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VGS=5.5V		VGS=6V		VGS=7V		VGS=8V		VGS=9V	
VD	ID	VD	ID	VD	ID	VD	ID	VD	ID
0.00	0.04	0.00	0.01	0.00	0.01	0.00	0.02	0.00	0.01
0.94	0.60	0.60	2.41	0.55	3.44	0.61	4.03	0.68	4.54
1.99	0.60	1.55	2.94	1.12	6.76	1.23	7.93	1.37	8.94
3.04	0.61	2.59	2.98	1.73	9.89	1.87	11.69	2.08	13.22
4.09	0.62	3.63	3.03	2.40	12.61	2.53	15.29	2.82	17.32
5.14	0.63	4.68	3.06	3.23	14.48	3.22	18.77	3.59	21.23
6.19	0.61	5.72	3.06	4.31	15.10	3.91	21.91	4.40	24.94
7.24	0.63	6.77	3.06	5.43	15.28	4.67	24.94	5.24	28.41
8.29	0.62	7.82	3.10	6.65	15.42	5.50	27.76	6.10	31.56
9.34	0.63	8.87	3.11	7.84	15.53	6.40	30.15	7.01	34.48
10.39	0.62	9.91	3.13	9.03	15.59	7.39	31.90	8.00	37.17
11.44	0.63	10.96	3.14	10.22	15.67	8.53	33.12	8.96	39.38
12.49	0.64	12.00	3.15	11.41	15.73	9.75	33.86	10.12	41.63
13.54	0.65	13.05	3.17	12.60	15.81	11.02	34.31	11.30	43.46
14.58	0.65	14.10	3.18	13.79	15.88	12.34	34.53	12.54	44.96
15.63	0.64	15.15	3.20	14.99	15.94	13.67	34.68	13.83	46.16
16.68	0.65	16.19	3.20	16.18	15.98	15.01	34.75	15.18	47.11
17.73	0.67	17.24	3.23	17.37	16.05	16.36	34.80	16.57	47.79
18.78	0.65	18.29	3.24	18.57	16.07	17.71	34.83	18.00	48.27
19.83	0.65	19.34	3.25	19.76	16.12	19.07	34.83	19.46	48.57
20.88	0.64	20.39	3.26	20.96	16.17	20.42	34.83	20.94	48.73

VGS=5.5V		VGS=6V		VGS=7V		VGS=8V		VGS=9V	
VD	ID	VD	ID	VD	ID	VD	ID	VD	ID
0.0038	0.027	0.0045	0.0275	0.003	0.034	0.002	0.0195	0.0045	0.0105
0.7489	1.8505	0.7549	2.085	0.8367	2.412	0.8943	2.636	0.9285	2.7575
1.6333	2.9555	1.5344	3.983	1.688	4.7315	1.8087	5.1475	1.8788	5.392
2.7108	3.073	2.3629	5.6215	2.5634	6.893	2.7419	7.5275	2.8476	7.868
3.8051	3.089	3.3229	6.609	3.4547	8.9785	3.6956	9.796	3.8386	10.236
4.9034	3.1045	4.4307	6.841	4.3705	10.934	4.671	11.9515	4.8537	12.499
5.9987	3.1285	5.567	6.8795	5.3077	12.7355	5.6612	13.962	5.891	14.624
7.097	3.1555	6.7084	6.9475	6.2738	14.378	6.677	15.877	6.9531	16.616
8.1947	3.1755	7.8495	6.9965	7.2844	15.8155	7.7188	17.646	8.0413	18.443
9.2908	3.1915	8.9924	7.007	8.3544	16.944	8.7879	19.269	9.1495	20.128
10.3897	3.195	10.1363	7.0455	9.4992	17.72	9.8884	20.7915	10.2886	21.7015
11.4865	3.2	11.2817	7.0675	10.6928	18.2375	11.0232	22.15	11.4565	23.1045
12.5835	3.2155	12.4238	7.101	11.9239	18.586	12.1859	23.3935	12.6518	24.4065
13.6817	3.2305	13.5691	7.1355	13.185	18.7915	13.3763	24.5005	13.8746	25.538
14.7801	3.2255	14.7128	7.146	14.4607	18.92	14.5931	25.483	15.1137	26.552
15.8763	3.2465	15.8581	7.1925	15.743	19.029	15.8193	26.328	16.3654	27.4215
16.9751	3.261	17.0043	7.199	17.0309	19.078	17.0673	27.0455	17.6561	28.24
18.0714	3.28	18.147	7.252	18.3179	19.167	18.3451	27.665	18.9714	28.915
19.1701	3.2875	19.2928	7.261	19.6076	19.2265	19.6485	28.2005	20.3068	29.5165
20.2687	3.2765	20.4373	7.2895	20.899	19.277	20.9644	28.643	21.6642	30.042
21.3644	3.3045	21.5842	7.292	22.1888	19.303	22.2996	29.012	23.0319	30.465

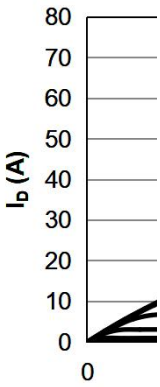
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VD	ID						
0.00	0.01						
0.72	4.92						
1.47	9.68						
2.24	14.26						
3.04	18.69						
3.88	22.88						
4.76	26.83						
5.68	30.49						
6.65	33.89						
7.67	36.95						
8.75	39.71						
9.87	42.08						
11.06	44.16						
12.31	45.90						
13.63	47.38						
15.00	48.58						
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17.91	50.23						
19.43	50.78						
20.99	51.10						
22.57	51.32						

Fig 1. Output Ch

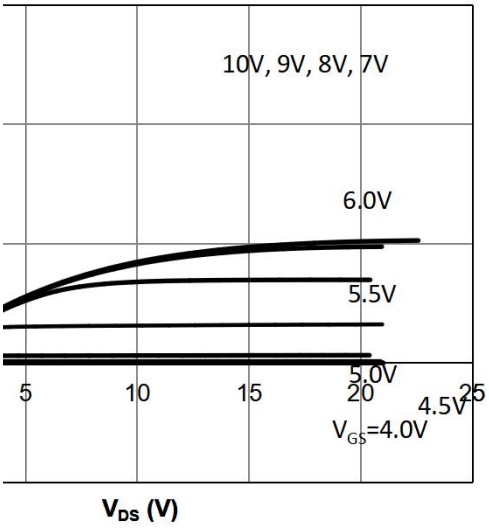


VGS=10V							
VD	ID						
0.0029	0.03						
0.9593	2.8645						
1.9412	5.5935						
2.9465	8.158						
3.973	10.6415						
5.0257	12.9435						
6.1039	15.1555						
7.2063	17.1675						
8.3365	19.0655						
9.4918	20.803						
10.6753	22.3665						
11.8904	23.81						
13.1366	25.0915						
14.4109	26.219						
15.7082	27.2425						
17.0078	28.122						
18.3508	28.887						
19.7186	29.5565						
21.1091	30.141						
22.513	30.636						
23.9382	31.055						

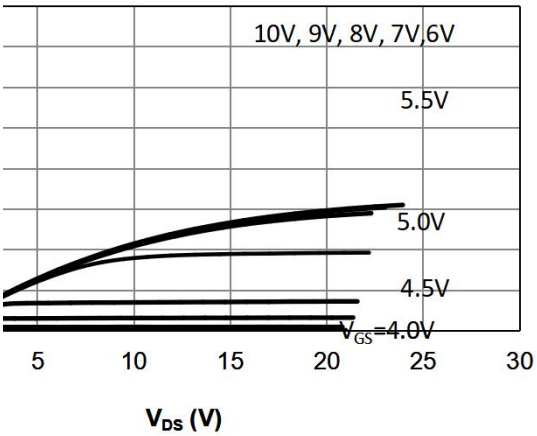
Fig 2. Output



haracteristics (Tj=25℃)



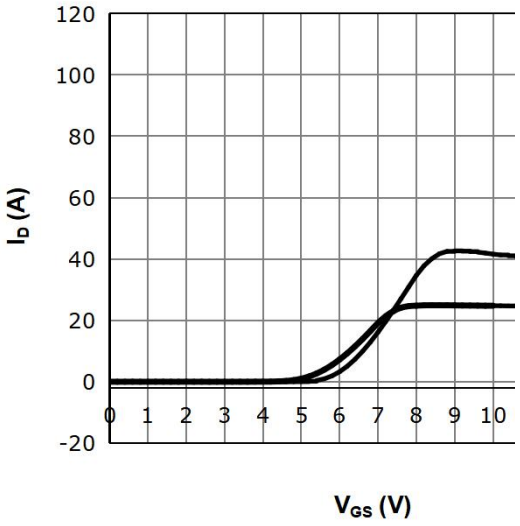
ıt Characteristics (Tj=150℃)



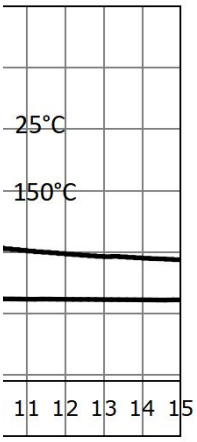
Vds=15V, Vgs=0~15V step=??? T=25C/150C, Id limited at 50A,

VGS（V）	25℃		IDS(150℃)
0	0.004855		0.015275
0.2	0.016354		0.004927
0.4	0.014966		0.009041
0.6	0.013691		0.017803
0.8	0.009394		0.006446
1	0.015562		0.008989
1.2	0.016355		0.020214
1.4	0.010207		0.017912
1.6	0.015608		0.011962
1.8	0.012868		7.54E-03
2	0.018563		0.028156
2.2	0.005418		0.011938
2.4	0.019041		0.013094
2.6	0.018192		-0.00101
2.8	0.015207		0.011
3	0.009801		0.012805
3.2	0.016706		0.010876
3.4	0.001381		0.016663
3.6	0.002218		0.010071
3.8	0.012518		0.034414
4	0.002494		0.040192
4.2	0.005601		0.054785
4.4	0.01887		0.136466
4.6	0.004617		0.261162
4.8	0.028794		0.540761
5	0.048047		1.014548
5.2	0.1704		1.722095
5.4	0.432328		2.706178
5.6	0.969028		3.953972
5.8	1.907894		5.47719
6	3.27268		7.276327
6.2	5.086488		9.299658
6.4	7.321572		11.54696
6.6	9.947311		13.94903
6.8	12.89758		16.52361
7	16.13892		19.13121
7.2	19.61539		21.33368
7.4	23.2763		22.9968
7.6	27.05046		24.122
7.8	30.87999		24.63039
8	34.66396		24.79769
8.2	37.79709		24.91297
8.4	40.06615		24.94224
8.6	41.69867		24.93188
8.8	42.48759		24.92516
9	42.65574		24.89961
9.2	42.56038		24.86253
9.4	42.41849		24.84765
9.6	42.2244		24.81946
9.8	41.93492		24.78239
10	41.59896		24.78572
10.2	41.31		24.76
10.4	41.05		24.70
10.6	40.82		24.70
10.8	40.57		24.68

Fig 3: Transfer Characteristics



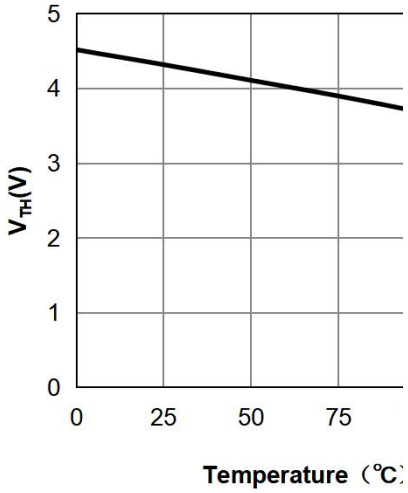
11	40.31		24.64
11.2	40.07		24.62
11.4	39.92		24.66
11.6	39.73		24.65
11.8	39.51		24.62
12	39.30		24.60
12.2	39.14		24.57
12.4	38.94		24.56
12.6	38.76		24.56
12.8	38.58		24.53
13	38.48		24.49
13.2	38.59		24.48
13.4	38.42		24.47
13.6	38.26		24.45
13.8	38.11		24.43
14	37.97		24.41
14.2	37.82		24.40
14.4	37.77		24.37
14.6	37.64		24.35
14.8	37.50		24.41
15	37.37		24.39

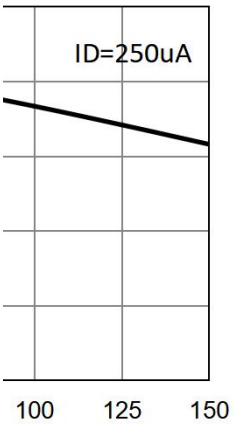

25°C
150°C
11 12 13 14 15

T=-50C~150C step=25C Id=250uA Vds=Vgs

TEMP（℃）	V_{TH} (V)
-50	4.93
-25	4.73
0	4.52
25	4.32
50	4.11
75	3.9
100	3.67
125	3.42
150	3.16

Fig 4: VGS(TH) Vs Tj Temperature Characteristics

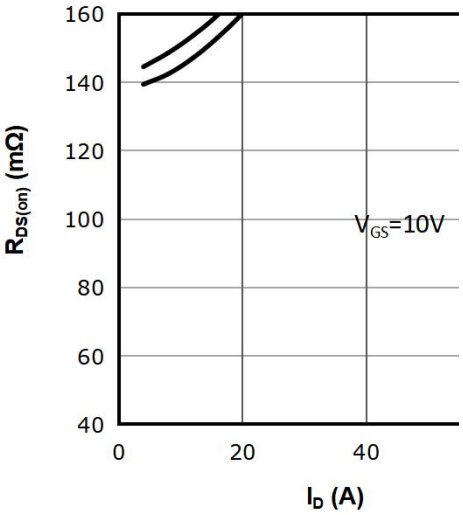



ID=250uA
100
125
150

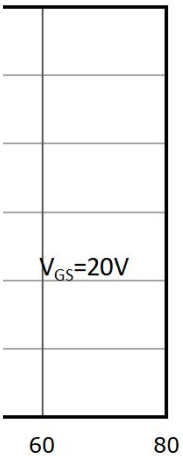
:)

	VGS = 10.00V	VGS = 20.00V
ID	RDSON	RDSON
4	144.521431	139.38642
8	148.600448	142.433037
12	153.645043	147.116356
16	159.736173	153.130322
20	168.083433	160.242973
24	178.145679	169.440223
28	191.585606	181.542513
32	210.125294	197.827249
36	236.801928	220.75281
40	278.142134	255.494069

Fig 5: Rdson Vs Ids Characteristics(Tc=

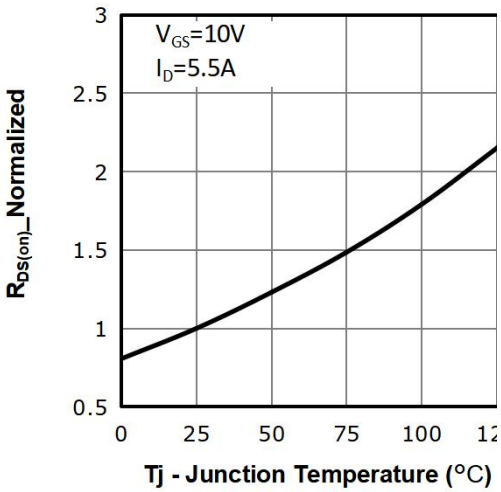


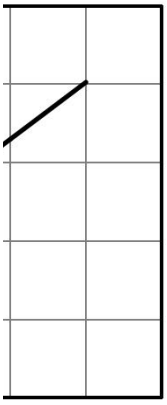
=25℃)



Temperature	RDSON	Ron_Nomalized
	VGS = 10.0 V	
	ID = 7.5 A	
-50	75.77	0.49
-25	97.58	0.64
0	123.6	0.81
25	153.3	1.00
50	188.6	1.23
75	227.8	1.49
100	274.6	1.79
125	329.6	2.15
150	385.2	2.51

Fig 6: Rds(on) vs. Temperature

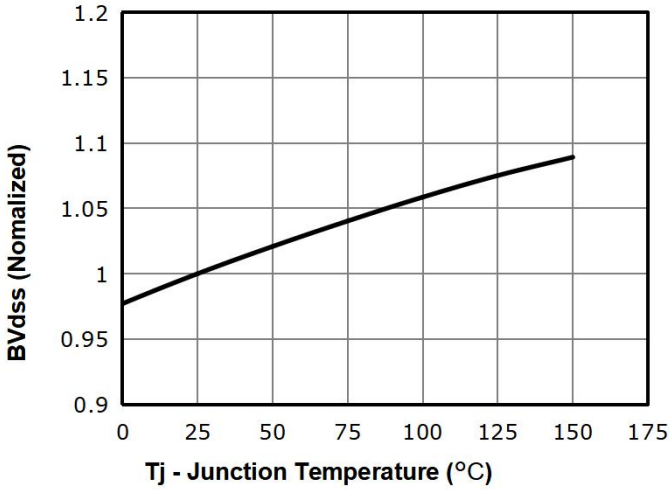



25
150
175

Vgs=0Vld=250uAT=25C/125C

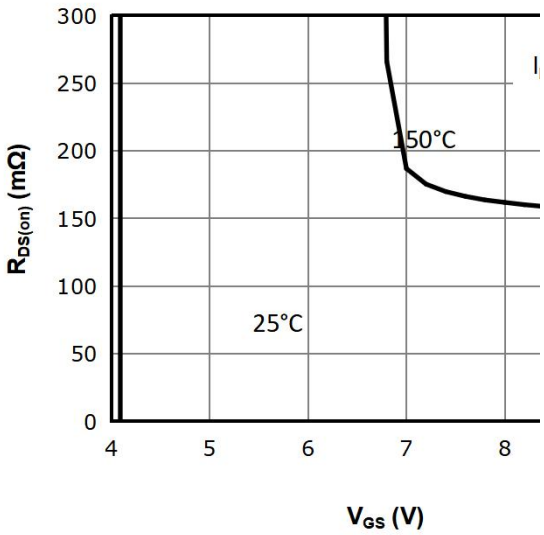
TEMP（℃）	BVDSS (V)	ss_Nomalized
-50	854.6	0.92
-25	881.4	0.95
0	904.3	0.98
25	925.5	1.00
50	944.8	1.02
75	962.8	1.04
100	979.7	1.06
125	995	1.08
150	1008	1.09

Fig 7: BVDSS vs. Temperature

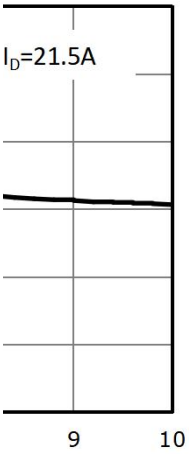


Notes:	25℃	150℃
MOSFET N-CHANNEL RDSON vs VGS		
VGS	RDSON	RDSON
0	20000863	5454908.182
0.2	-4444641	10909717.27
0.4	-2.4E+07	3636462.727
0.6	-4E+07	-10
0.8	-1E+07	-5000093.333
1	-6666904	-15000335
1.2	12000236	60001190
1.4	9230950	10909408.18
1.6	-3529498	-10909410
1.8	-3E+07	5000173.333
2	23999996	2790738.837
2.2	-1.3E+07	-4615556.154
2.4	4444492	-6000050
2.6	7059137	120001390
2.8	6315964	-6666632.222
3	-6000174	2790771.395
3.2	8000223	8000123.333
3.4	-1.5E+07	120001590
3.6	-4E+07	20000256.67
3.8	30000446	2553160.213
4	-8000297	6666434.444
4.2	10000146	1008268.992
4.4	4800108	517043.4483
4.6	3749996	227499.2979
4.8	2553166	102367.9487
5	821841.2	54890.27548
5.2	338818.6	29686.50026
5.4	126674.4	17207.65778
5.6	54889.44	10218.57143
5.8	26178.64	6082.179896
6	13192.87	3522.827721
6.2	6849.49	1821.142196
6.4	3394.262	754.07947
6.6	1380.959	455.145765
6.8	266.1289	425.427
7	186.8754	413.817849
7.2	175.3433	407.572524
7.4	169.8642	402.623865
7.6	166.3093	400.012098
7.8	163.6577	396.619208
8	161.8604	395.075634
8.2	160.1524	392.780553
8.4	158.8222	391.883961
8.6	157.8636	390.499813
8.8	157.1566	389.649883
9	156.5712	388.310023
9.2	155.5861	387.567478
9.4	155.1981	387.199183
9.6	154.61	386.37

Fig 8: Rds(on) vs Gate Voltage

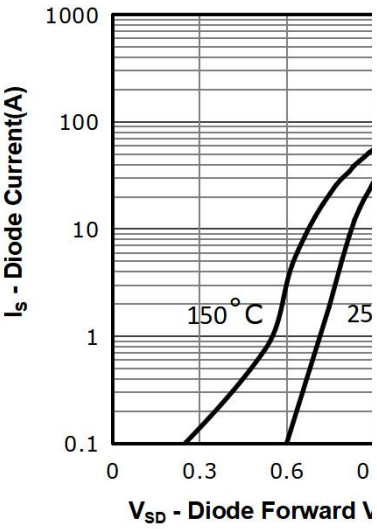


9.8	154.21	385.59
10	153.51	385.19


I_D=21.5A
9
10

Notes:	25℃		150℃
MOSFET N-CHANNEL IS vs VSD			
Vsd	IDS(25℃)	Vsd	IDS(150℃)
0.01	0.04	0.01	0.02
0.51	0.02	0.52	0.74
0.75	1.88	0.62	4.58
0.79	5.18	0.66	8.67
0.82	8.62	0.70	12.94
0.83	12.19	0.73	17.17
0.85	15.63	0.75	21.50
0.87	19.16	0.77	25.73
0.88	22.68	0.79	30.03
0.90	26.21	0.82	34.34
0.91	29.79	0.83	38.70
0.92	33.34	0.85	43.02
0.93	36.87	0.87	47.30
0.94	40.41	0.88	51.58
0.95	43.93	0.90	55.87
0.96	47.43	0.92	60.17
0.97	50.94	0.94	64.49
0.98	54.49	0.95	68.69
1.00	57.97	0.97	72.96
1.00	61.43	0.98	77.19
1.01	64.88	1.00	81.30
1.02	68.37	1.01	85.57
1.03	71.89	1.02	89.99
1.04	75.32	1.04	94.36
1.05	78.73	1.05	98.64
1.06	82.13	1.07	102.97
1.07	85.63	1.08	107.36
1.08	89.07	1.10	111.66
1.09	92.43	1.11	116.04
1.09	95.89	1.13	120.28
1.10	99.38	1.14	124.59
1.11	102.84	1.15	128.83
1.12	106.24	1.17	133.12
1.13	109.75	1.18	137.44
1.14	113.11	1.20	141.77
1.14	116.53	1.21	146.09
1.15	120.04	1.22	150.31
1.16	123.44	1.24	154.66
1.17	126.93	1.25	158.93
1.18	130.36	1.26	163.19
1.18	133.90	1.28	167.59
1.19	137.45	1.29	171.83
1.20	141.00	1.31	176.08
1.21	144.77	1.32	180.27
1.22	148.43	1.33	184.61
1.23	152.21	1.34	188.90
1.24	155.87	1.36	193.56
1.25	159.70	1.37	197.50
1.25	163.47	1.39	202.24
1.26	167.17	1.40	206.71
1.27	171.05	1.42	211.15
1.28	174.72	1.43	215.63
1.29	178.50	1.45	220.09
1.30	182.15	1.46	224.62

Fig 9: Body-diode Forward Char



1.31	186.06	1.48	229.15
1.32	189.80	1.49	233.74
1.32	193.50	1.51	238.21
1.33	197.26	1.52	242.62
1.34	200.91	1.53	247.29
1.35	204.84		
1.36	208.77		
1.37	212.29		
1.38	216.19		
1.39	219.85		
1.40	223.66		
1.40	227.34		
1.41	231.32		
1.42	234.93		
1.43	238.73		
1.44	242.36		
1.45	246.31		
1.46	249.92		
1.47	253.90		
1.48	257.57		
1.49	261.40		
1.50	265.50		
1.51	268.98		
1.52	272.84		

racteristics

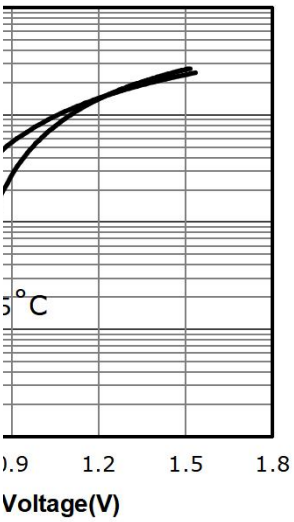
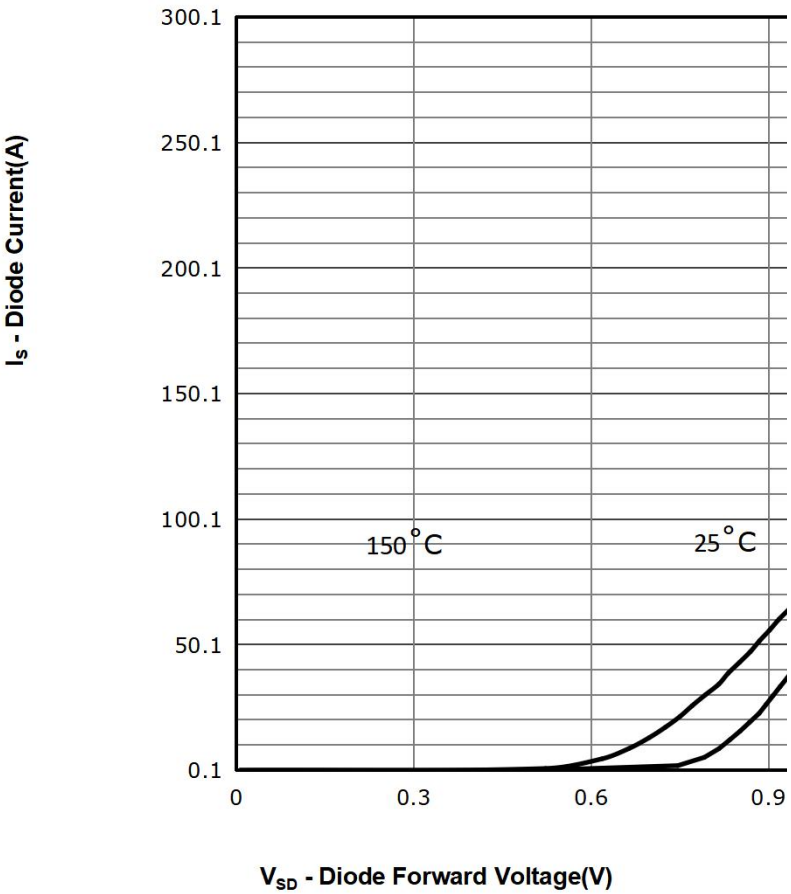
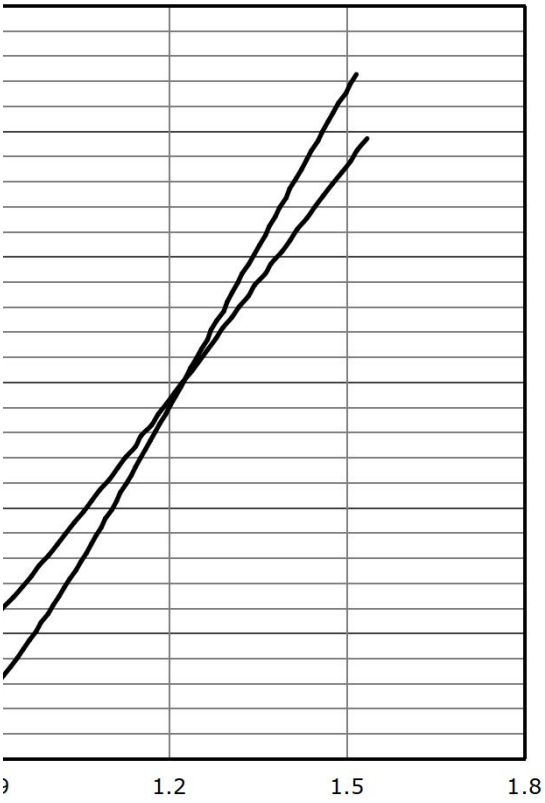


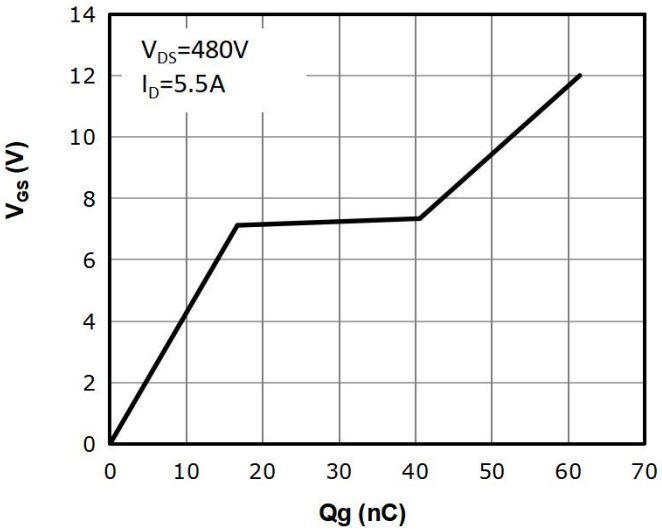
Fig 9: Body-diode Forward Characteristics




1.2
1.5
1.8

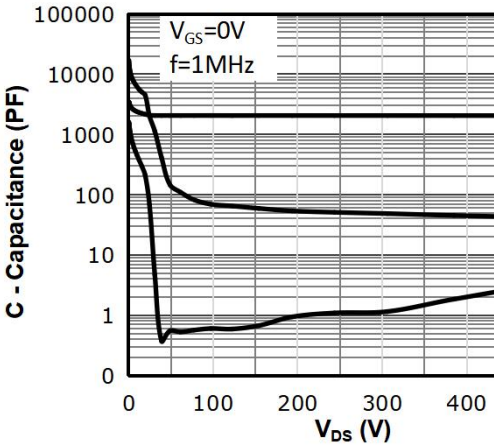
Vgs	Q
0	0
7.12	16.68
7.34	40.56
12	61.5

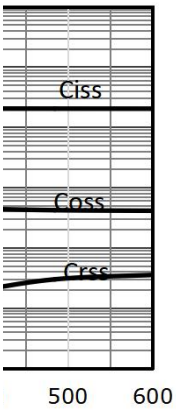
Fig 10: Gate Charge Characteristics



NO.			
Voltage[V]	Ciss[pF]	Coss[pF]	Crss[pF]
0.1065	3475.78	17027.9	1597.81
0.132	3466.33	16814	1589.98
0.166	3460.54	16542.9	1581.63
0.2055	3449.6	16241.7	1568.24
0.263	3434.23	15892.2	1550.93
0.3225	3416.42	15472.2	1531.24
0.4045	3389.78	15020.9	1504.89
0.5055	3357.25	14517.8	1469.37
0.6345	3318.14	13961.1	1427.79
0.8015	3265.63	13372.4	1372.87
1.0005	3201.26	12725.5	1303.17
1.26	3123.94	12065.8	1223.62
1.5835	3043.45	11370.7	1137.66
1.9875	2956.77	10673.9	1049.45
2.4915	2873.7	9989.65	961.224
3.1375	2788.44	9319.33	872.525
3.941	2703.66	8662.35	785.672
4.949	2619.87	8021.42	698.245
6.227	2537.74	7404.65	614.457
7.824	2459.06	6806.59	532.738
9.8435	2381.64	6198.58	453.806
12.371	2309.7	5585.91	375.605
15.5565	2234.24	5052.8	297.6
19.562	2161.15	4495.86	210.869
24.6075	2080.74	2028.7	68.8277
30.939	2059.52	1130.67	4.70157
38.9125	2057.96	412.319	0.371605
48.9305	2059.72	145.599	0.552281
61.536	2058.42	109.489	0.528085
77.3935	2059.24	82.2478	0.567605
97.3285	2059.62	69.4835	0.602119
122.401	2056.34	64.9239	0.59105
153.9335	2058.36	59.25	0.673265
193.5845	2057.56	53.7913	0.941763
243.4635	2055.84	51.0662	1.09169
306.1865	2056.37	48.5991	1.15243
385.069	2053.91	45.1822	1.8508
484.2735	2049.44	42.3967	3.01843
609.0355	2045.01	41.4522	3.61476

Fig 11: Capacitance Characteristics




Ciss
Coss
Crss
500
600

max/typ	1.4

RthJC_test	0.322
RthJC_max	0.45024

RthJA_test	63.53
RthJA_max	89

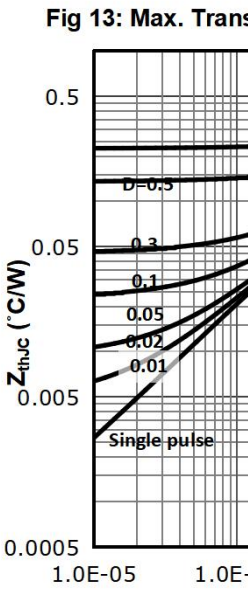
T(sec)	Single Pulse(Test)	Single Pulse(Max)	0.5	0.3	0.1	0.05
1.00E-06	0.0002276	0.00031864	0.1609	0.09658	0.03228	0.01621
1.20E-06	0.0002713	0.00037982	0.1609	0.0966	0.0323	0.01624
1.40E-06	0.0003144	0.00044016	0.1609	0.09661	0.03233	0.01626
1.60E-06	0.0003571	0.00049994	0.1609	0.09663	0.03235	0.01629
1.90E-06	0.0004201	0.00058814	0.1609	0.09665	0.03239	0.01633
2.30E-06	0.0005026	0.00070364	0.161	0.09669	0.03243	0.01638
2.70E-06	0.0005834	0.00081676	0.161	0.09672	0.03248	0.01642
3.20E-06	0.0006824	0.00095536	0.161	0.09676	0.03253	0.01648
3.70E-06	0.0007794	0.00109116	0.161	0.0968	0.03259	0.01654
4.40E-06	0.0009122	0.00127708	0.1611	0.09686	0.03266	0.01662
5.20E-06	0.00106	0.001484	0.1611	0.09692	0.03274	0.0167
6.10E-06	0.001223	0.0017122	0.1612	0.09699	0.03283	0.0168
7.20E-06	0.001417	0.0019838	0.1612	0.09707	0.03293	0.01691
8.50E-06	0.001641	0.0022974	0.1613	0.09716	0.03305	0.01704
1.00E-05	0.001894	0.0026516	0.1614	0.09726	0.03318	0.01718
1.20E-05	0.002224	0.0031136	0.1615	0.09739	0.03335	0.01737
1.40E-05	0.002548	0.0035672	0.1615	0.09751	0.03352	0.01756
1.60E-05	0.002867	0.0040138	0.1616	0.09763	0.03368	0.01775
1.90E-05	0.00334	0.004676	0.1618	0.09781	0.03393	0.01803
2.30E-05	0.003961	0.0055454	0.1619	0.09805	0.03426	0.01841
2.70E-05	0.004573	0.0064022	0.1621	0.09828	0.03459	0.0188
3.20E-05	0.005329	0.0074606	0.1623	0.09858	0.035	0.01929
3.70E-05	0.006076	0.0085064	0.1625	0.09887	0.03542	0.01979
4.40E-05	0.007106	0.0099484	0.1628	0.09928	0.03602	0.0205
5.20E-05	0.008265	0.011571	0.1631	0.09974	0.0367	0.02133
6.10E-05	0.009545	0.013363	0.1635	0.1003	0.03749	0.02227
7.20E-05	0.01108	0.015512	0.1639	0.1009	0.03845	0.02344
8.50E-05	0.01285	0.01799	0.1644	0.1017	0.03961	0.02483
1.00E-04	0.01484	0.020776	0.165	0.1025	0.04096	0.02644
1.20E-04	0.01741	0.024374	0.1658	0.1037	0.04276	0.02857
1.40E-04	0.01989	0.027846	0.1665	0.1048	0.04456	0.03068
1.60E-04	0.0223	0.03122	0.1673	0.106	0.04636	0.03276
1.90E-04	0.02575	0.03605	0.1684	0.1077	0.04901	0.0358
2.30E-04	0.03012	0.042168	0.1699	0.1099	0.05246	0.03969
2.70E-04	0.03423	0.047922	0.1713	0.1121	0.0558	0.04339
3.20E-04	0.03905	0.05467	0.1731	0.1148	0.05979	0.04776
3.70E-04	0.04355	0.06097	0.1748	0.1174	0.06357	0.05187
4.40E-04	0.04938	0.069132	0.1771	0.1208	0.06854	0.05721
5.20E-04	0.05546	0.077644	0.1795	0.1245	0.07376	0.06278
6.10E-04	0.06166	0.086324	0.1822	0.1284	0.07912	0.06848
7.20E-04	0.06847	0.095858	0.1851	0.1328	0.08503	0.07475
8.50E-04	0.07563	0.105882	0.1883	0.1376	0.09124	0.08133
1.00E-03	0.08291	0.116074	0.1917	0.1424	0.09756	0.08805
0.0012	0.09136	0.127904	0.1957	0.1481	0.1049	0.09585
0.0014	0.09869	0.138166	0.1992	0.153	0.1112	0.1026
0.0016	0.1051	0.14714	0.2023	0.1574	0.1167	0.1086
0.0019	0.1136	0.15904	0.2063	0.163	0.124	0.1165
0.0023	0.1232	0.17248	0.2109	0.1693	0.1322	0.1255
0.0027	0.1314	0.18396	0.2147	0.1746	0.1392	0.1332
0.0032	0.1402	0.19628	0.2188	0.1803	0.1469	0.1417
0.0037	0.148	0.2072	0.2223	0.1852	0.1537	0.1491
0.0044	0.1576	0.22064	0.2265	0.1912	0.1622	0.1584
0.0052	0.1671	0.23394	0.2307	0.1973	0.1709	0.1677
0.0061	0.1766	0.24724	0.2349	0.2034	0.1796	0.1771
0.0072	0.1869	0.26166	0.2395	0.2102	0.1892	0.1872

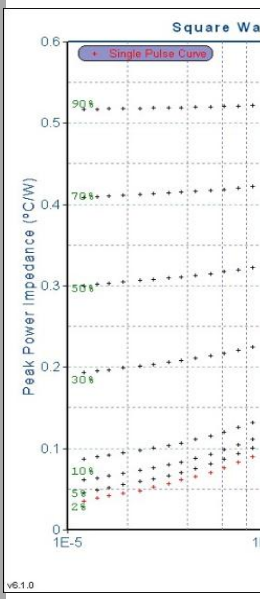
0.0085	0.1975	0.2765	0.2444	0.2175	0.1992	0.1977
0.01	0.2082	0.29148	0.2495	0.225	0.2094	0.2083
0.012	0.2205	0.3087	0.2555	0.234	0.2213	0.2205
0.014	0.2309	0.32326	0.2609	0.2419	0.2315	0.2309
0.016	0.2399	0.33586	0.2658	0.249	0.2403	0.2399
0.019	0.2512	0.35168	0.2722	0.2581	0.2514	0.2512
0.023	0.2632	0.36848	0.2794	0.2681	0.2633	0.2632
0.027	0.2726	0.38164	0.2853	0.2762	0.2727	0.2726
0.032	0.2817	0.39438	0.2913	0.2842	0.2817	0.2817
0.037	0.2887	0.40418	0.2961	0.2905	0.2887	0.2887
0.044	0.2961	0.41454	0.3013	0.2973	0.2961	0.2961
0.052	0.3021	0.42294	0.3057	0.3029	0.3021	0.3021
0.061	0.3069	0.42966	0.3094	0.3074	0.3069	0.3069
0.072	0.3109	0.43526	0.3125	0.3112	0.3109	0.3109
0.085	0.314	0.4396	0.3151	0.3142	0.314	0.314
0.1	0.3163	0.44282	0.317	0.3164	0.3163	0.3163
0.12	0.3182	0.44548	0.3186	0.3183	0.3182	0.3182
0.14	0.3194	0.44716	0.3196	0.3194	0.3194	0.3194
0.16	0.3201	0.44814	0.3202	0.3201	0.3201	0.3201
0.19	0.3207	0.44898	0.3208	0.3207	0.3207	0.3207
0.23	0.3211	0.44954	0.3212	0.3211	0.3211	0.3211
0.27	0.3213	0.44982	0.3214	0.3213	0.3213	0.3213
0.32	0.3215	0.4501	0.3215	0.3215	0.3215	0.3215
0.37	0.3215	0.4501	0.3216	0.3216	0.3215	0.3215
0.44	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
0.52	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
0.61	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
0.72	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
0.85	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
1	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
1.2	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
1.4	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
1.6	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
1.9	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
2.3	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
2.7	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
3.2	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
3.7	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
4.4	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
5.2	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
6.1	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
7.2	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
8.5	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
10	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
12	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
14	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
16	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
19	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
23	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
27	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
32	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
37	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
44	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
52	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
61	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
72	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
85	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216

100	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
120	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
140	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
160	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
190	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
230	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
270	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
320	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
370	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
440	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
520	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
610	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
720	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
850	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
1000	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
1200	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
1400	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
1600	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
1900	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
2300	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
2700	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
3200	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
3700	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
4400	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
5200	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
6100	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
7200	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
8500	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
10000	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
12000	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
14000	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
16000	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
19000	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
23000	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
27000	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
32000	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
37000	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
44000	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
52000	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
61000	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
72000	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
85000	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
100000	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
120000	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
140000	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
160000	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
190000	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
230000	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
270000	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
320000	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
370000	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
440000	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
520000	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
610000	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
720000	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
850000	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216
1000000	0.3216	0.45024	0.3216	0.3216	0.3216	0.3216

0.02	0.01	0.5(*1.4)	0.3(*1.4)	0.1(*1.4)	0.05(*1.4)	0.02(*1.4)	0.01(*1.4)
0.006573	0.003362	0.22526	0.135212	0.045192	0.022694	0.009202	0.004707
0.006601	0.003391	0.22526	0.13524	0.04522	0.022736	0.009241	0.004747
0.006628	0.00342	0.22526	0.135254	0.045262	0.022764	0.009279	0.004788
0.006656	0.003448	0.22526	0.135282	0.04529	0.022806	0.009318	0.004827
0.006696	0.00349	0.22526	0.13531	0.045346	0.022862	0.009374	0.004886
0.006748	0.003545	0.2254	0.135366	0.045402	0.022932	0.009447	0.004963
0.0068	0.003599	0.2254	0.135408	0.045472	0.022988	0.00952	0.005039
0.006862	0.003666	0.2254	0.135464	0.045542	0.023072	0.009607	0.005132
0.006924	0.003732	0.2254	0.13552	0.045626	0.023156	0.009694	0.005225
0.007008	0.003823	0.22554	0.135604	0.045724	0.023268	0.009811	0.005352
0.007102	0.003926	0.22554	0.135688	0.045836	0.02338	0.009943	0.005496
0.007206	0.004041	0.22568	0.135786	0.045962	0.02352	0.010088	0.005657
0.007331	0.00418	0.22568	0.135898	0.046102	0.023674	0.010263	0.005852
0.007476	0.004345	0.22582	0.136024	0.04627	0.023856	0.010466	0.006083
0.007643	0.004535	0.22596	0.136164	0.046452	0.024052	0.0107	0.006349
0.007865	0.00479	0.2261	0.136346	0.04669	0.024318	0.011011	0.006706
0.008089	0.005047	0.2261	0.136514	0.046928	0.024584	0.011325	0.007066
0.008314	0.005306	0.22624	0.136682	0.047152	0.02485	0.01164	0.007428
0.008657	0.005699	0.22652	0.136934	0.047502	0.025242	0.01212	0.007979
0.009122	0.006229	0.22666	0.13727	0.047964	0.025774	0.012771	0.008721
0.009597	0.006765	0.22694	0.137592	0.048426	0.02632	0.013436	0.009471
0.0102	0.007438	0.22722	0.138012	0.049	0.027006	0.01428	0.010413
0.01081	0.008113	0.2275	0.138418	0.049588	0.027706	0.015134	0.011358
0.01168	0.009058	0.22792	0.138992	0.050428	0.0287	0.016352	0.012681
0.01268	0.01013	0.22834	0.139636	0.05138	0.029862	0.017752	0.014182
0.0138	0.01133	0.2289	0.14042	0.052486	0.031178	0.01932	0.015862
0.01517	0.01277	0.22946	0.14126	0.05383	0.032816	0.021238	0.017878
0.01678	0.01445	0.23016	0.14238	0.055454	0.034762	0.023492	0.02023
0.01861	0.01635	0.231	0.1435	0.057344	0.037016	0.026054	0.02289
0.02099	0.01881	0.23212	0.14518	0.059864	0.039998	0.029386	0.026334
0.02331	0.02119	0.2331	0.14672	0.062384	0.042952	0.032634	0.029666
0.02556	0.0235	0.23422	0.1484	0.064904	0.045864	0.035784	0.0329
0.02882	0.02684	0.23576	0.15078	0.068614	0.05012	0.040348	0.037576
0.03296	0.03107	0.23786	0.15386	0.073444	0.055566	0.046144	0.043498
0.03686	0.03507	0.23982	0.15694	0.07812	0.060746	0.051604	0.049098
0.04145	0.03977	0.24234	0.16072	0.083706	0.066864	0.05803	0.055678
0.04575	0.04417	0.24472	0.16436	0.088998	0.072618	0.06405	0.061838
0.05133	0.04989	0.24794	0.16912	0.095956	0.080094	0.071862	0.069846
0.05717	0.05587	0.2513	0.1743	0.103264	0.087892	0.080038	0.078218
0.06314	0.06198	0.25508	0.17976	0.110768	0.095872	0.088396	0.086772
0.06973	0.06872	0.25914	0.18592	0.119042	0.10465	0.097622	0.096208
0.07667	0.07581	0.26362	0.19264	0.127736	0.113862	0.107338	0.106134
0.08377	0.08305	0.26838	0.19936	0.136584	0.12327	0.117278	0.11627
0.09202	0.09146	0.27398	0.20734	0.14686	0.13419	0.128828	0.128044
0.09921	0.09876	0.27888	0.2142	0.15568	0.14364	0.138894	0.138264
0.1056	0.1052	0.28322	0.22036	0.16338	0.15204	0.14784	0.14728
0.1139	0.1136	0.28882	0.2282	0.1736	0.1631	0.15946	0.15904
0.1234	0.1232	0.29526	0.23702	0.18508	0.1757	0.17276	0.17248
0.1315	0.1314	0.30058	0.24444	0.19488	0.18648	0.1841	0.18396
0.1403	0.1402	0.30632	0.25242	0.20566	0.19838	0.19642	0.19628
0.1481	0.148	0.31122	0.25928	0.21518	0.20874	0.20734	0.2072
0.1576	0.1576	0.3171	0.26768	0.22708	0.22176	0.22064	0.22064
0.1672	0.1671	0.32298	0.27622	0.23926	0.23478	0.23408	0.23394
0.1767	0.1766	0.32886	0.28476	0.25144	0.24794	0.24738	0.24724
0.1869	0.1869	0.3353	0.29428	0.26488	0.26208	0.26166	0.26166

G-L列填写原始数据



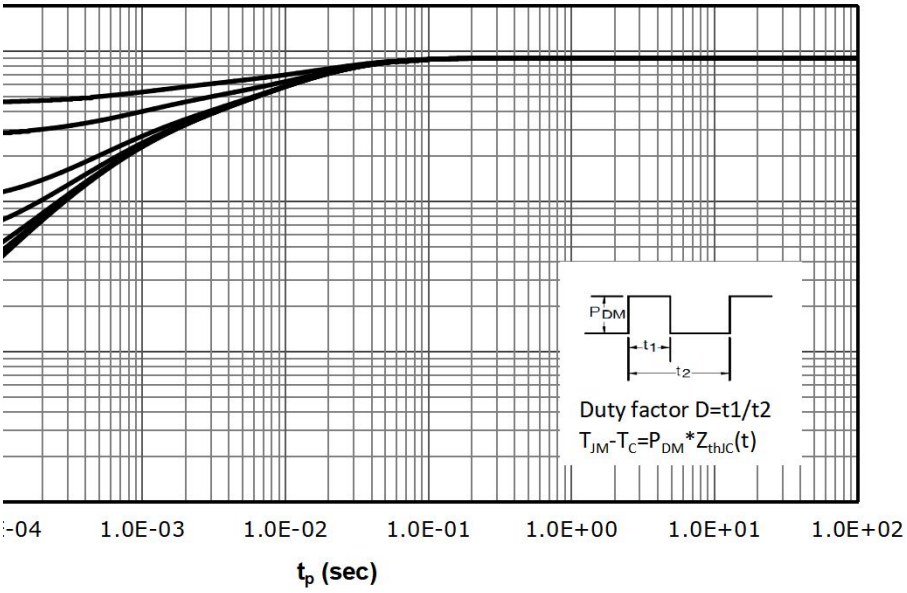


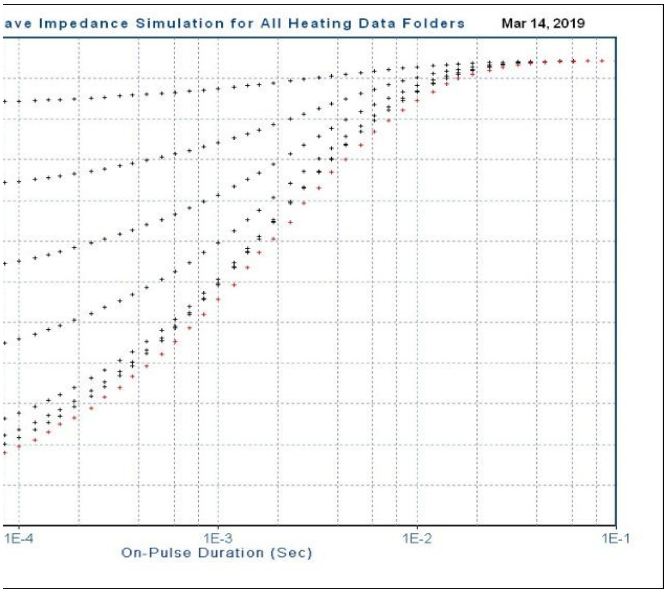
0.1975	0.1975	0.34216	0.3045	0.27888	0.27678	0.2765	0.2765
0.2082	0.2082	0.3493	0.315	0.29316	0.29162	0.29148	0.29148
0.2205	0.2205	0.3577	0.3276	0.30982	0.3087	0.3087	0.3087
0.2309	0.2309	0.36526	0.33866	0.3241	0.32326	0.32326	0.32326
0.2399	0.2399	0.37212	0.3486	0.33642	0.33586	0.33586	0.33586
0.2512	0.2512	0.38108	0.36134	0.35196	0.35168	0.35168	0.35168
0.2632	0.2632	0.39116	0.37534	0.36862	0.36848	0.36848	0.36848
0.2726	0.2726	0.39942	0.38668	0.38178	0.38164	0.38164	0.38164
0.2817	0.2817	0.40782	0.39788	0.39438	0.39438	0.39438	0.39438
0.2887	0.2887	0.41454	0.4067	0.40418	0.40418	0.40418	0.40418
0.2961	0.2961	0.42182	0.41622	0.41454	0.41454	0.41454	0.41454
0.3021	0.3021	0.42798	0.42406	0.42294	0.42294	0.42294	0.42294
0.3069	0.3069	0.43316	0.43036	0.42966	0.42966	0.42966	0.42966
0.3109	0.3109	0.4375	0.43568	0.43526	0.43526	0.43526	0.43526
0.314	0.314	0.44114	0.43988	0.4396	0.4396	0.4396	0.4396
0.3163	0.3163	0.4438	0.44296	0.44282	0.44282	0.44282	0.44282
0.3182	0.3182	0.44604	0.44562	0.44548	0.44548	0.44548	0.44548
0.3194	0.3194	0.44744	0.44716	0.44716	0.44716	0.44716	0.44716
0.3201	0.3201	0.44828	0.44814	0.44814	0.44814	0.44814	0.44814
0.3207	0.3207	0.44912	0.44898	0.44898	0.44898	0.44898	0.44898
0.3211	0.3211	0.44968	0.44954	0.44954	0.44954	0.44954	0.44954
0.3213	0.3213	0.44996	0.44982	0.44982	0.44982	0.44982	0.44982
0.3215	0.3215	0.4501	0.4501	0.4501	0.4501	0.4501	0.4501
0.3215	0.3215	0.45024	0.45024	0.4501	0.4501	0.4501	0.4501
0.3216	0.3216	0.45024	0.45024	0.45024	0.45024	0.45024	0.45024

0.3216	0.3216	0.45024	0.45024	0.45024	0.45024	0.45024	0.45024

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sient Thermal Impedance





TC(°C)	PD (W)
0	278
25	278
50	222
75	167
100	111
125	56
150	0
175	-56

Max Tj	150	°C
RthJC	0.45024	°C/W
Rds(on) max	0.18	ohm
Ron k@Tj	2.513	-
Package limit	28	A

TC	ID(Silicon)	ID limit
0	24.8	24.8
25	24.8	24.8
30	24.3	24.3
35	23.8	23.8
40	23.2	23.2
45	22.7	22.7
50	22.2	22.2
55	21.6	21.6
60	21.0	21.0
65	20.4	20.4
70	19.8	19.8
75	19.2	19.2
80	18.5	18.5
85	17.9	17.9
90	17.2	17.2
95	16.4	16.4
100	15.7	15.7
105	14.9	14.9
110	14.0	14.0
115	13.1	13.1
120	12.1	12.1
125	11.1	11.1
130	10	10
135	9	9
140	7	7
145	5	5
150	0	0
155	#NUM!	#NUM!
160	#NUM!	#NUM!
165	#NUM!	#NUM!
170	#NUM!	#NUM!
175	#NUM!	#NUM!

Package Wire Current limit:

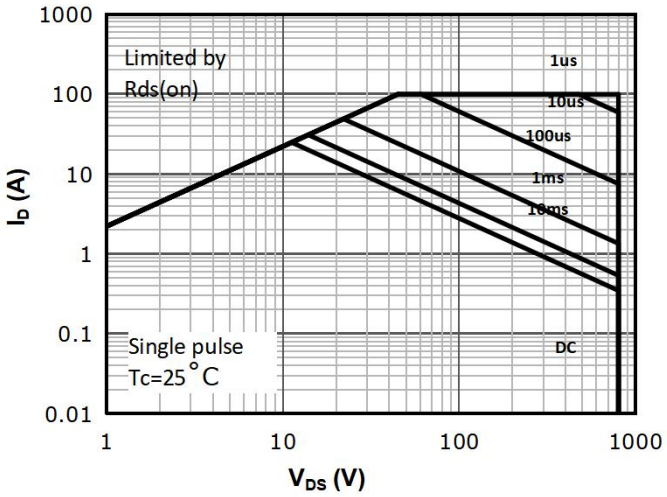
Merterial	D(mils)	I(A) <=1mm	I(A) >1mm
Cu/Au	1	0.9	0.6
Cu/Au	1.3	1.4	1.0
Cu/Au	1.5	1.7	1.2
Cu/Au	2	2.7	1.8
Al	1	0.7	0.5
Al	1.25	1.0	0.7
Al	1.5	1.3	0.9
Al	2	2.0	1.4
Al	3	3.6	2.5
Al	4	5.6	3.8
Al	5	7.8	5.4
Al	8	16	11
Al	10	22	15
Al	12	29	20
Al	15	40	28
Al	18	53	37
Al	20	62	43
Al	25	87	60
Al	26	92	64
Al	27	98	67
Al	28	103	71
Al	29	109	75
Al	30	114	79
Al	31	120	83
Al	32	126	87
Al	33	132	91
Al	34	138	95
Al	35	144	100
Al	36	150	104
Al	37	157	108
Al	38	163	113
Al	39	169	117
Al	40	176	122
Al	41	183	126
Al	42	189	131
Al	43	196	136
Al	44	203	140
Al	45	210	145

RθJC_max	0.450
PD	277.6
BVDSS	800
I_D	25
I_{DP}	99.10251
封装限流	28
Ron_max	0.18
k	2.51272
Ron@Tj_max	0.45229

tp	DC	0.01	0.001	0.0001	0.00001
Zth_max	0.450	0.291	0.116	0.021	0.003
PD	278	429	1077	6017	47141
ID	24.77563	30.792313	48.795438	115.3362	322.84398
ID limit	24.77563	30.792313	48.795438	99.10251	99.102508

DC		10ms		1ms	
VDS	ID	VDS	ID	VDS	ID
0.01	0.02	0.01	0.02	0.01	0.02
11.20576	24.77563	13.927044	30.792313	22.06967	48.795438
11.20576	24.77563	13.927044	30.792313	22.06967	48.795438
800	0.347037	800	0.5360574	800	1.346124
800	0.01	800	0.01	800	0.01

Fig 12: Safe Operating Area



0.000001
0.000
392292
931.314888
99.1025081

100us		10us		1us	
VDS	ID	VDS	ID	VDS	ID
0.01	0.02	0.01	0.02	0.01	0.02
44.8230365	99.102508	44.82304	99.10251	44.82304	99.10251
60.710447	99.102508	475.6827	99.10251	800	99.10251
800	7.520697	800	58.92669	800	99.10251
800	0.01	800	0.01	800	0.01

Product Name	Marking	Package	VDS (max) (V)	ID(max) (A)	RDS(on) (typ) (@10V) (mΩ)	RDS(on) (typ) (@4.5V) (mΩ)	VGS (max) (V)
CRJS180N80G	CRJS180N80G	TO-263	800	25	145		±30

封装代码（1-2位）	Package	Packing	Reel Size	Tape Width	Qty
F	TO-220F	Tube	N/A	N/A	50pcs
T	TO-220	Tube	N/A	N/A	50pcs
Q	TO-247	Tube	N/A	N/A	25pcs
S	TO-263	Tape&Reel	N/A	N/A	1000pcs
L	DFN8*8	Tape&Reel	N/A	N/A	3000pcs
D	TO-252	Tape&Reel	N/A	N/A	2500pcs
M	DFN5*6	Tape&Reel	N/A	N/A	000/5000pcs
H	TO-251	Tube	N/A	N/A	75pcs
W	TO-262	Tube	N/A	N/A	50pcs
Z	TOLL	Tape&Reel	N/A	N/A	2000pcs
SP	TO-263-7	Tape&Reel	N/A	N/A	800pcs
PH	TO-3PH	Tube	N/A	N/A	-
QF	TO-247-4L	Tube	N/A	N/A	25/30pcs

VTH (typ) (V)	PD(max) (W)
0	278