

650V SiC Schottky Diode

4Amp

GP3D040A065U

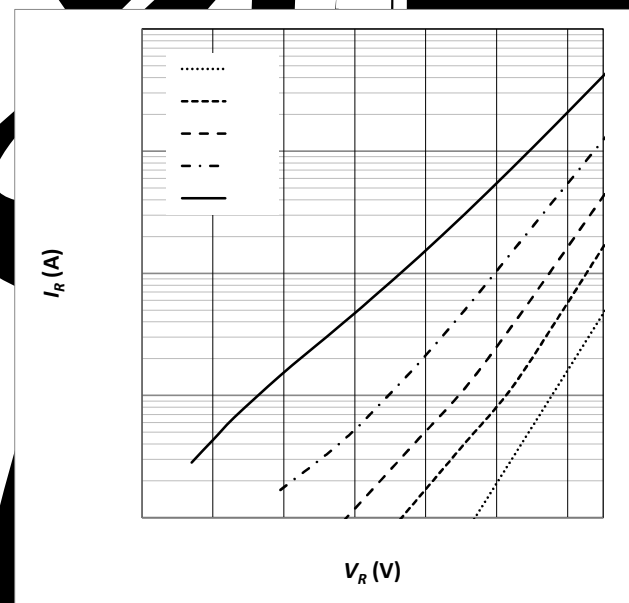
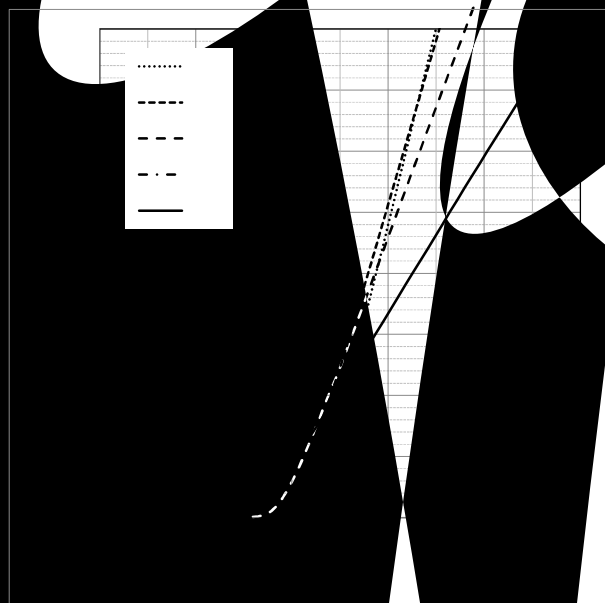
Electrical Characteristics

Characteristics Per Leg	Symbol	Conditions	Value	Unit
CBR	I_{FS}	$T_J = 175^{\circ}\text{C}$	4	A
Avg. Power Dissipation	P_{avg}	$T_J = 175^{\circ}\text{C}$	0.44	W
Ch. Temp. Coefficient	α_{Tj}	$T_J = 175^{\circ}\text{C}$	0.8/	W/°C
Static Forward Voltage	V_F	$I_F = 1\text{A}$	0.8	V
Static Reverse Leakage Current	I_R	$V_R = 650\text{V}$	1	μA
Storage Time	t_{stg}	$I_F = 1\text{A}$	0.1	μs
Switching Time	t_{sw}	$I_F = 1\text{A}$	0.1	μs

Thermal Characteristics

Characteristics Per Leg	Symbol	Conditions	Value	Unit
Static Thermal Resistance	$R_{\theta JA}$	$T_J = 175^{\circ}\text{C}$	0.4	$^{\circ}\text{C/W}$

Typical Performance Per Leg



S(

ara

c

d.l.d h dc 2 S(

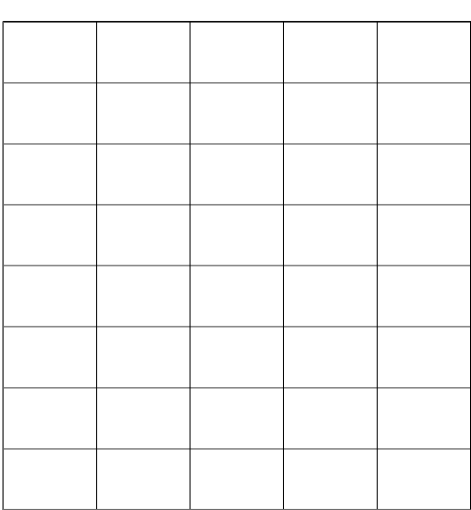


Fig. 3 Reverse Characteristics

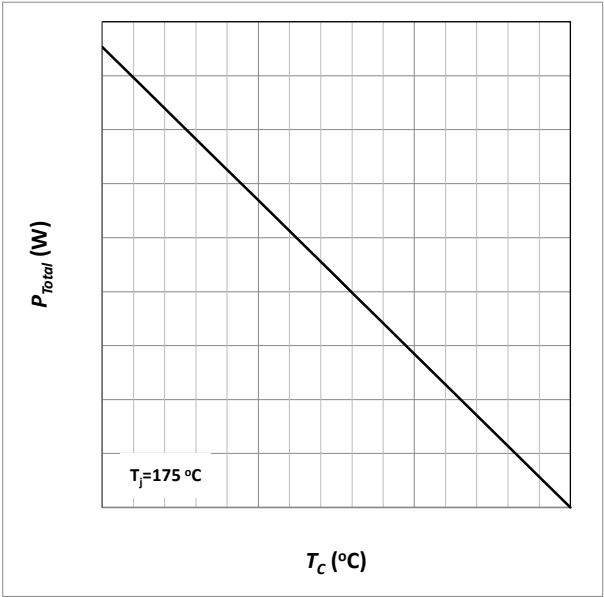


Fig. 4 Power Derating

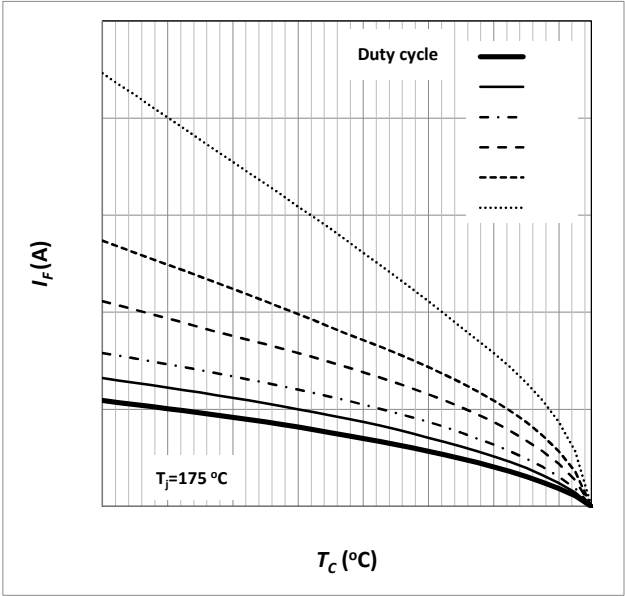


Fig. 5 Current Derating

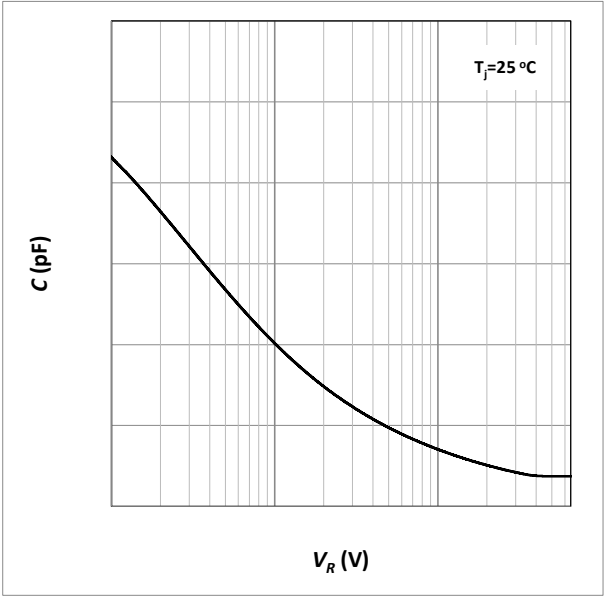


Fig. 6 Capacitance

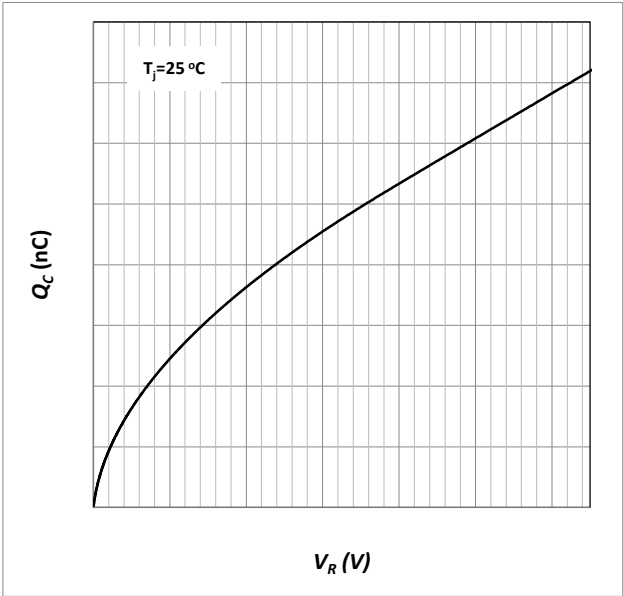


Fig. 7 Capacitive Charge

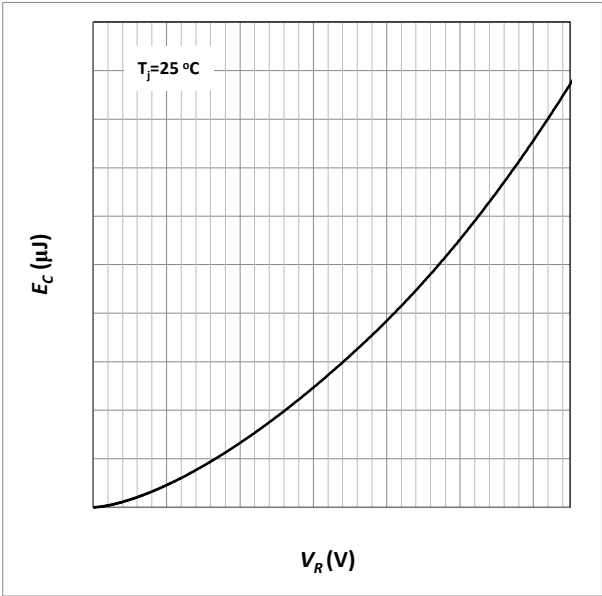


Fig. 8 Typical Capacitance Stored Energy

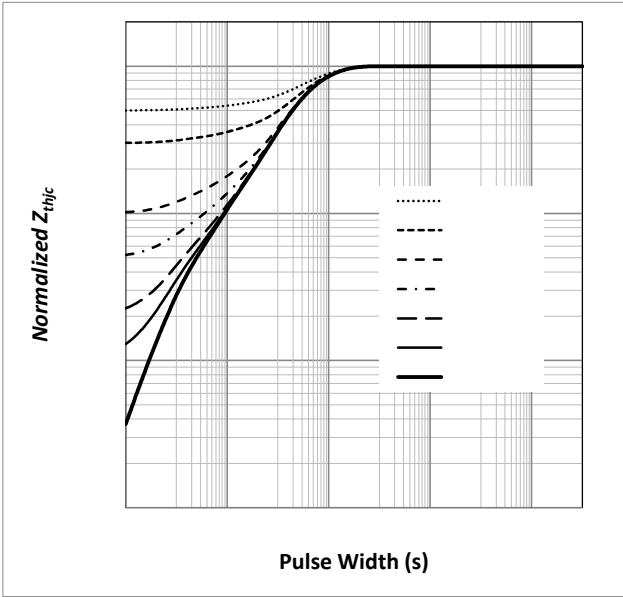


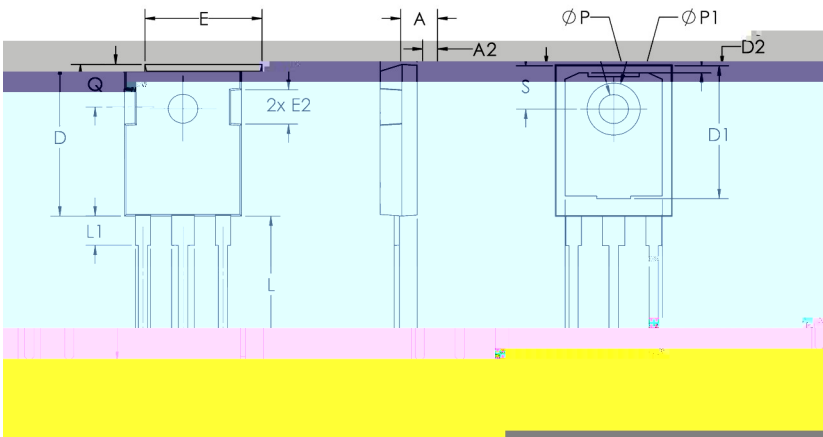
Fig. 9 Transient Thermal Impedance

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Package Dimensions TO-247-3L



Sym	Millimeters		Inches	
	Min	Max	Min	Max
	3-6/	4-20	/ -074	/ -1/ 8
0	1-10	1-48	/ -76	/ -0/ 1
1	0-4/	1-38	/ -48	/ -1/ 87
a	/ -88	0-3/	/ -28	/ -1/ 44
a1	0-54	1-28	/ -54	/ -1/ 83
a3	1-48	2-32	/ -0/ 1	/ -024
b	/ -27	/ -78	/ -1/ 04	/ -1/ 24
C	1/ -7/	10-35	/ -708	/ -734
C0	02-7	06-54	/ -404	/ -584
C1	/ -40	0-24	/ -1/ 1/	/ -1/ 42
D	04-38	05-15	/ -50/	/ -53/
D0	02-35	03-05	/ -42/	/ -446
D1	2-32	4-38	/ -024	/ -1/ 05
d	4-33 ARB		/ -1/ 03 ARB	
K	08-70	1/ -21	/ -67/	/ -7/ 1
K0	3-0/	3-4/	/ -050	/ -066
O	2-45	2-55	/ -03/	/ -033
O0	6-75	6-28	/ -167	/ -180
P	4-28	5-1/	/ -101	/ -133
R	5-73	5-2/	/ -127	/ -137

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Revision History

C 1d	Qd h 12	M2Ld
01.1/.1/08	0-/	Hhh d'd - d 2ec L-L gddL
1.1/.1/1/	0-0	T- hf Qgbl lb e2 H c Q2L
3.1/.1/10	0-1	T c Ldc e c 2 L f d- db, h e c Ld b2 cd. ed 10/ 0 XXV V e L(