

650V SiC Schottky Diode

VDC	650 V
Q _C	54 nC***
I _F	20 A***
T _{J,max}	175 °C

The double layer Schottky diode is a high speed, low forward voltage drop, low reverse leakage current, and low capacitance device. It is suitable for high frequency, high voltage, and high current applications. The device is available in a TO-247-3L package.

Benefits

- Low forward voltage drop
- Low reverse leakage current
- Low capacitance
- High frequency

Device is available in a TO-247-3L package.

Amp+™ Applications

Rectifier for power supplies, motor drives, and other high power applications. The device is suitable for high frequency, high voltage, and high current applications. The device is available in a TO-247-3L package.

Part #	Package
GP3D020A065U	TO-247-3L

Maximum Ratings

	Symbol	Conditions	Values	
M ₂ , d d d d d j e d b d L	H ₂)	S _B 14 B S ₁ 064 B	18	
		S _B 014 B S ₁ 064 B	04	
		S _B 04/ B S ₁ 064 B	8	
		S _B 14 B L 7-2 -	64	
1 d	H ₂ RL	S _B 00/ B L 7-2 -	54	1.
		S _B 14 B L 0/ -	67/	
		S _B 14 B L 7-2 -	12	
		S _B 00/ B L 7-2 -		
Qd d d d d d j d d d 2 L f d	U _{QOL}	S ₁ 14 B		U
Ch cd f f d c d -		S ₁ 2 - d L d		U. -
Q ₂ d ch h L ₂	Q ₂))	S _B 14 B		V
N L L h f i b L ₂ - L ₂ f d	S ₁ S ₂ f d	B ₂ L ₂ 2 -		B
L ₂ d L d	S ₂ cd	V d - 2 cd h f d c.		B
R ₂ cd h f L ₂ d L d		L 2 R b d	0	M,

Notes:

b Q_B
b



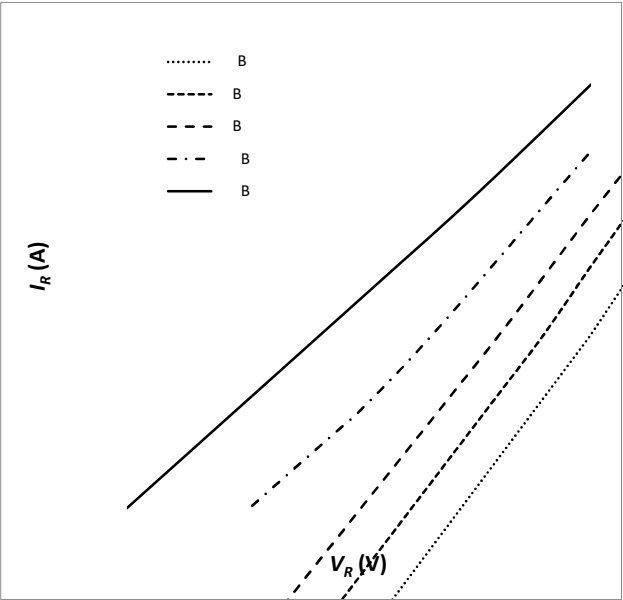
U_{CB}
 U_{AQ}

P_B



$Q_{gl\ B}$

T□□□ #



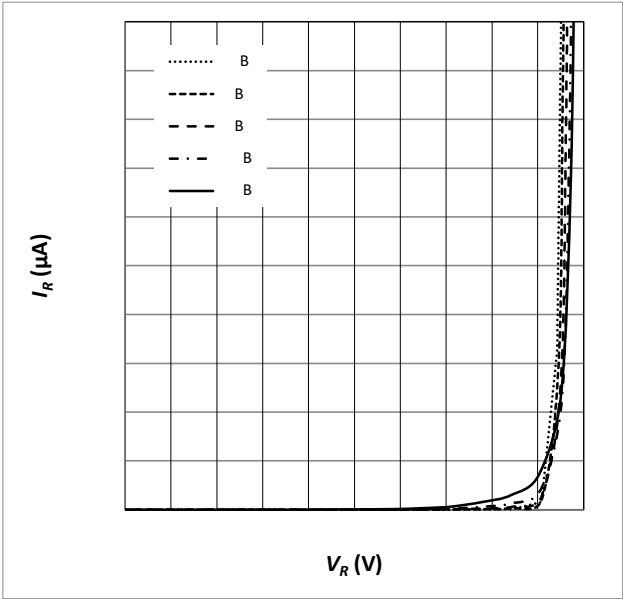


Fig. 3 Reverse Characteristics

d.d h dc 2 S(

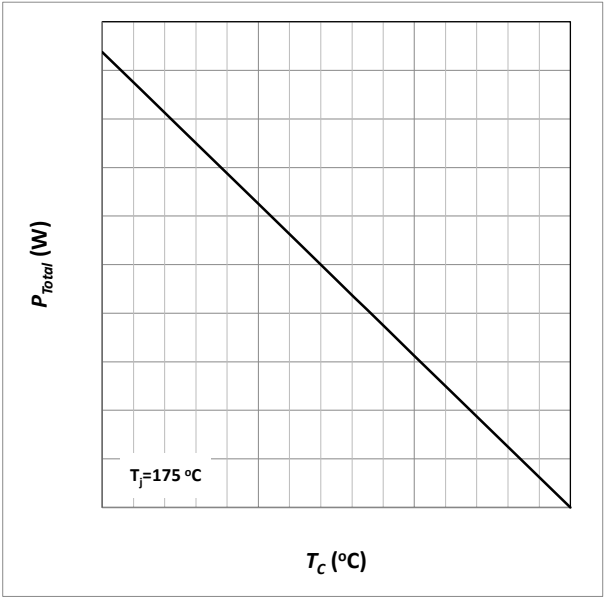


Fig. 4 Power Derating

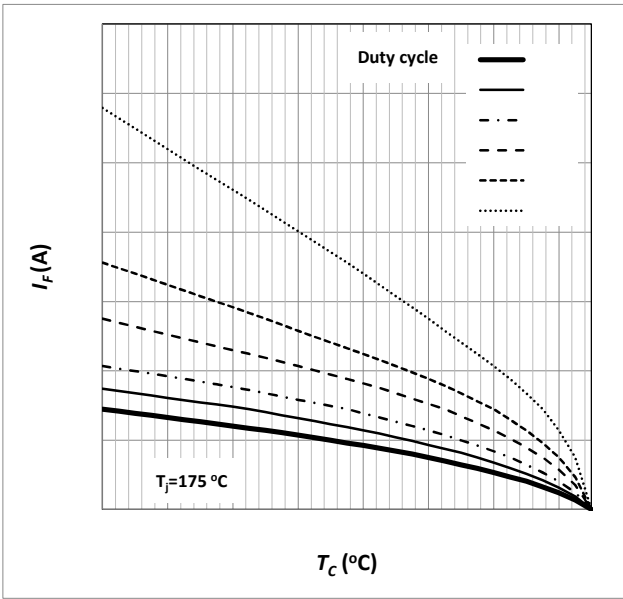


Fig. 5 Current Derating

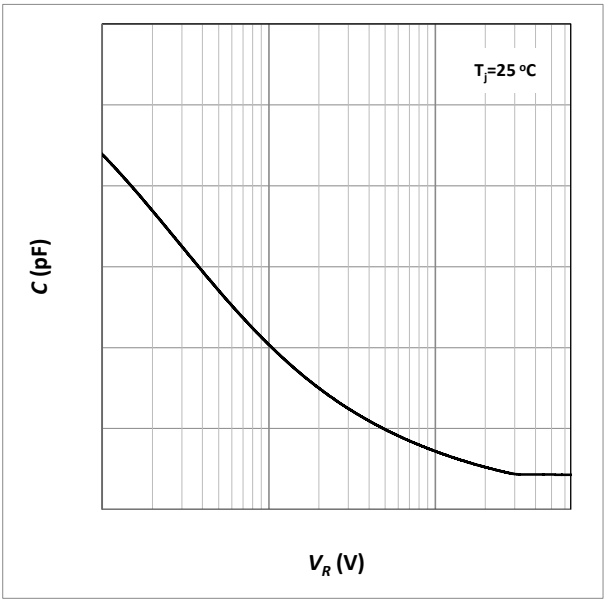


Fig. 6 Capacitance

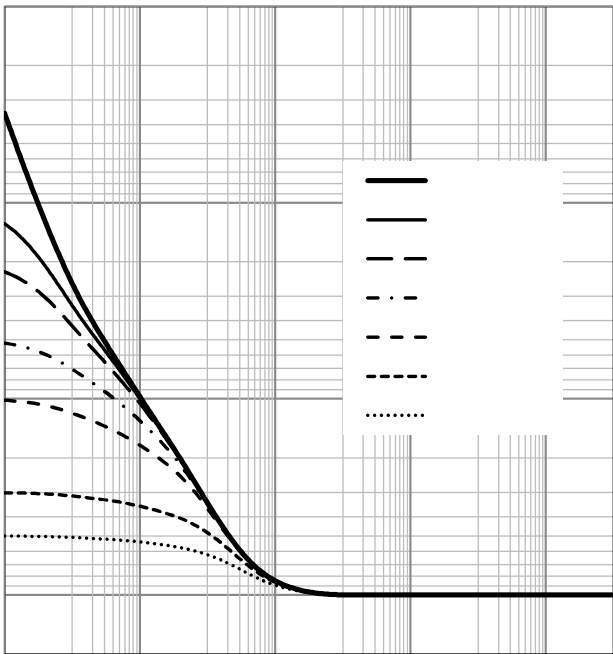
$$\lambda^B(\lambda)$$

$$T^l=52\text{ }^{\circ}\text{C}$$

$$E^C(\ln)$$

$$\text{Pulse Width (s)}$$

$$\text{Normalized } \Sigma_{\text{thjc}}$$

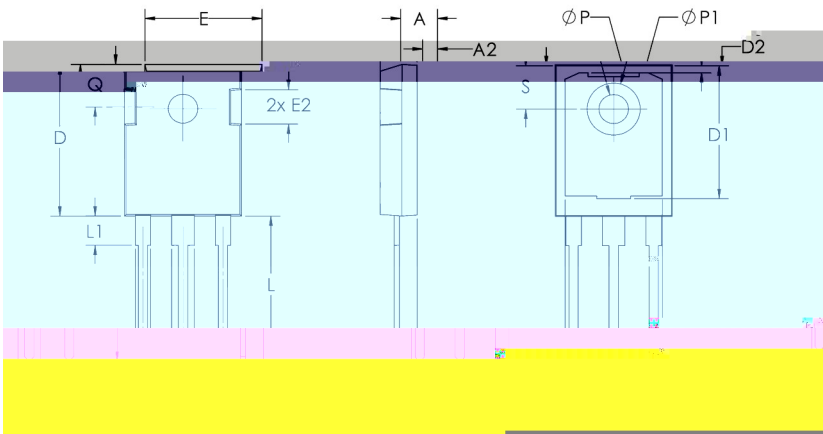


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Amp+™

GP3D020A065U

Package Dimensions TO-247-3L



Sym	Millimeters		Inches	
	Min	Max	Min	Max
	3-6/	4-20	/ -074	/ -1/ 8
0	1-1 0	1-48	/ -1/ 76	/ -0/ 1
1	0-4/	1-38	/ -1/ 48	/ -1/ 87
a	/ -88	0-3/	/ -1/ 28	/ -1/ 44
a1	0-54	1-28	/ -1/ 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	02-1/ 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/ /
K0	3-0/	3-4/	/ -050	/ -066
O	2-45	2-55	/ -03/	/ -033
O0	6-1/ 5	6-28	/ -167	/ -180
P	4-28	5-1/	/ -101	/ -133
R	5-1/ 3	5-2/	/ -127	/ -137

GP3D020A065U

C 1d	Qd h h	M2Ld
00.708	0-/	Hh h d d . d 2 ec L . ggdL
01.08.1/ 08	0-0	B2 d d L d bg f d c 1dc Qg b . db
1.1/.1/ 02	0-1	T . h f Qgjb L h e H c Q2L
3.2/.1/10	0-2	T c 1dc e c 2 L f d . db . f d Qgjb, h e c 1d b2 cd . ed 10/ 0 XXV V e L(

RoHS Compliance

REACH Compliance

[illegible]