

# 650V SiC Schottky Diode

V <sub>DC</sub>	650 V
Q <sub>C</sub>	54 nC***
I <sub>F</sub>	20 A***
T <sub>j,max</sub>	175 °C

T h2 dbLd hbg f d b d L  
 Yd 2 d d d db2 d b d L  
 E - Ld d L d,h cd d cd L. hbg f  
 bgd Ld Ldc L2 56 1)  
 " L Ld Ldc L2 f d Ld Lg 604U

## TM Benefits

Md d 2 - abgh f 2 -

D - L2 d

## Amp+ TM Applications

R hbg 2 cd 2 d - Ld TCR  
 Q2 d e bl2 b2 dbL2  
 DU bg f h f - L L2 -  
 N L L dbLd L2

Part #

Package

GP3D020A065U

TO-247-3L

## Maximum Ratings

	Symbol	Conditions	Values	
M <sub>2</sub> , Q <sub>d</sub> , Q <sub>2</sub> , Q <sub>2d</sub> , R <sub>2</sub> , L <sub>2</sub>	H <sub>2</sub>	S <sub>B</sub> 14 B S <sub>I</sub> 064 B	18	
		S <sub>B</sub> 014 B S <sub>I</sub> 064 B	04	
		S <sub>B</sub> 04/ B S <sub>I</sub> 064 B	8	
	H <sub>ERL</sub>	S <sub>B</sub> 14 B L 7-2 -	64	
		S <sub>B</sub> 00/ B L 7-2 -	54	
	H	S <sub>B</sub> 14 B L 0/ -	67/	
	J <sup>1</sup>	S <sub>B</sub> 14 B L 7-2 -	12	
		S <sub>B</sub> 00/ B L 7-2 -		1
Q <sub>d</sub>	U <sub>QQL</sub>	S <sub>I</sub> 14 B	U	
C <sub>2</sub> cd		S <sub>I</sub> 2 - d Ld	U	
Q <sub>2</sub> d ch. h L2	O <sub>2</sub>	S <sub>B</sub> 14 B	V	
N L Lh f i bL2 - L2 fd	S <sub>I</sub> S <sub>I</sub> fd	B <sub>2</sub> Lh 2 -	B	
R <sub>2</sub> cd h f Ld d L d	S <sub>I</sub> S <sub>I</sub> cd	V d - 2 cd h f d c -	B	
L <sub>2</sub> Lh f L2 d		L 2 Rb d	0	M

Notes:

B

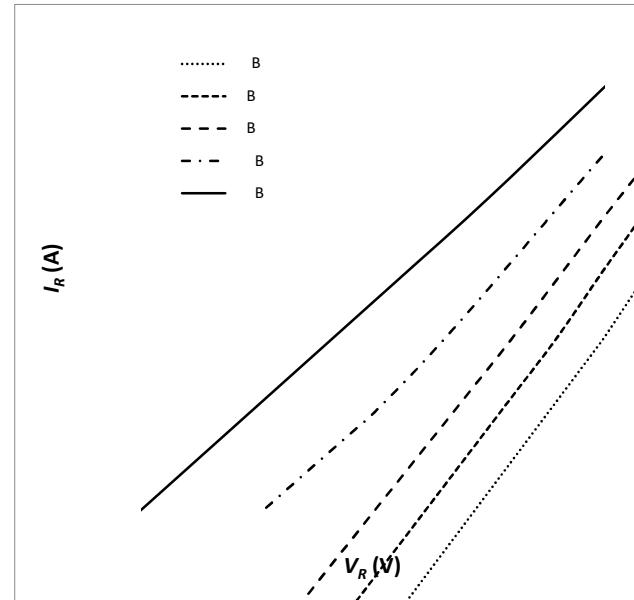
b Q<sub>B</sub>  
b

U<sub>CB</sub>  
U<sub>AQ</sub>

P<sub>B</sub>

Q<sub>glB</sub>

T  $\square$   $\square$   $\square$  #



Q

b

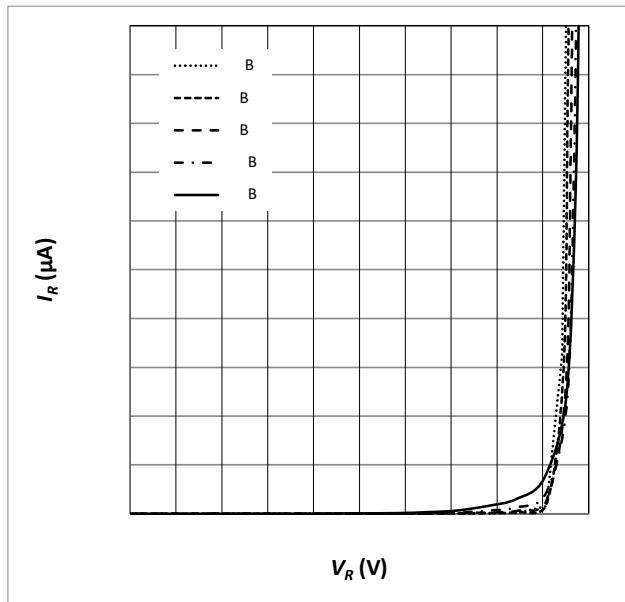


Fig. 3 Reverse Characteristics

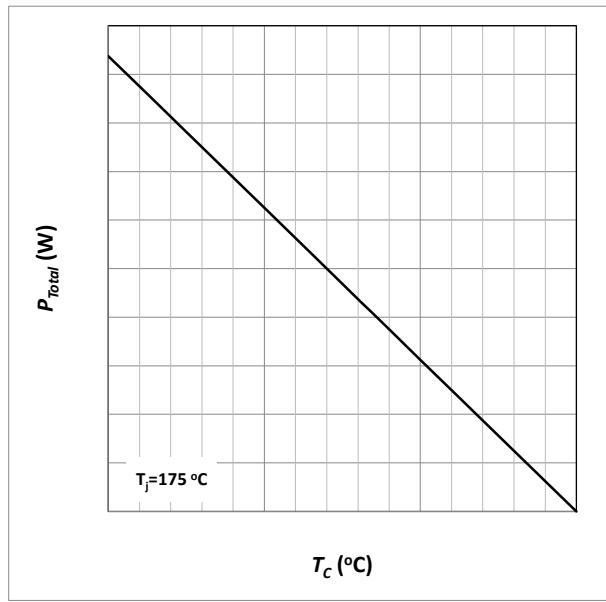


Fig. 4 Power Derating

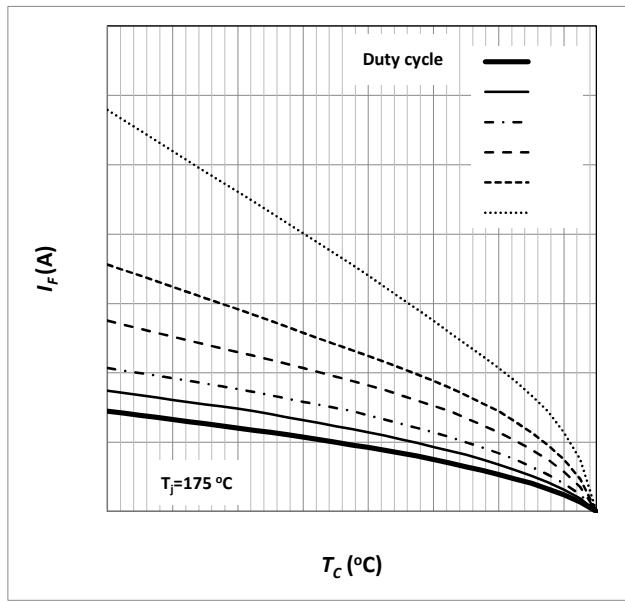


Fig. 5 Current Derating

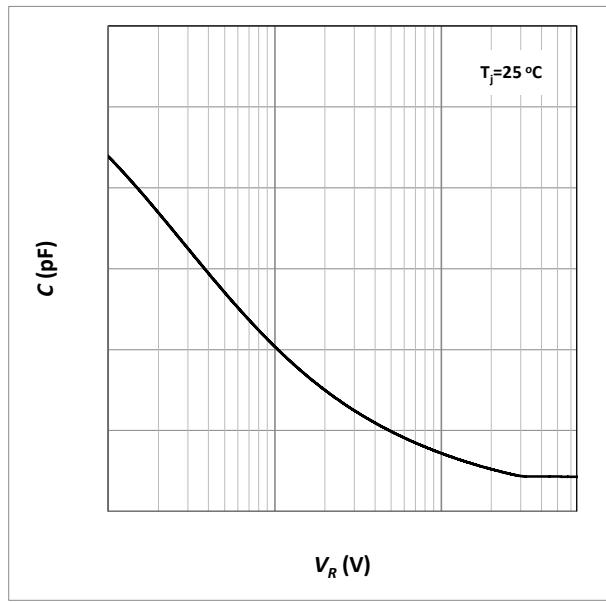
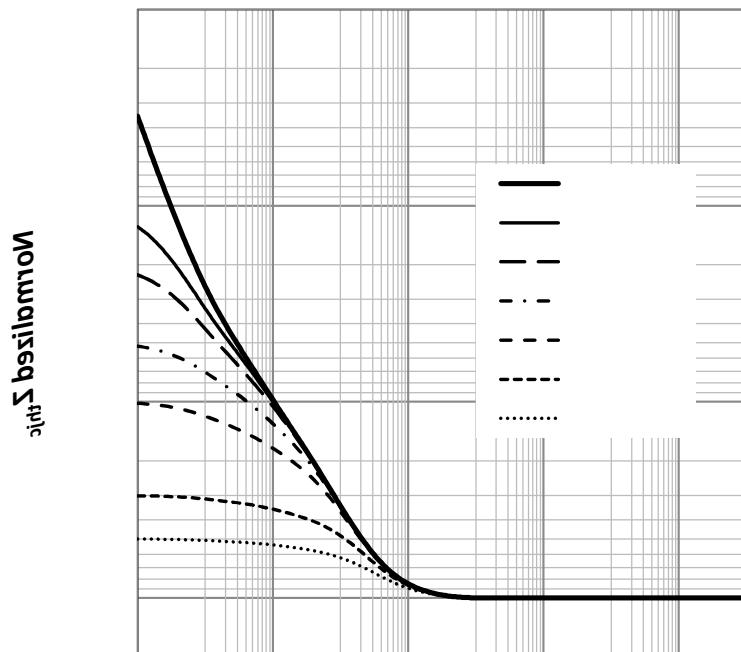


Fig. 6 Capacitance

(e)  $\text{ntbIW aslu}$



$\Lambda^b(\Lambda)$

$E_C(t)$

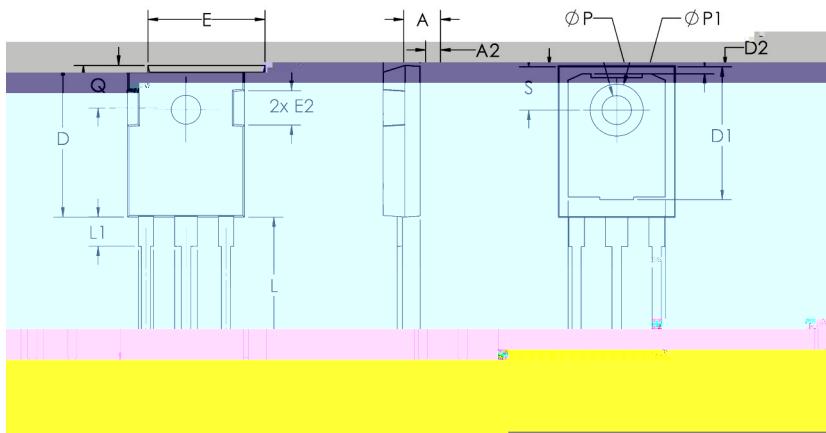
$T=52^{\circ}\text{C}$

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*Amp* +<sup>TM</sup>

**GP3D020A065U**

## Package Dimensions TO-247-3L



Sym	Millimeters		Inches	
	Min	Max	Min	Max
	3-6/	4-20	1/-074	1/-1/8
0	1-10	1-48	1/-76	1/-0/1
1	0-4/	1-38	1/-48	1/-87
a	1/-88	0-3/	1/-28	1/-44
a1	0-54	1-28	1/-54	1/-83
a3	1-48	2-32	1/-0/1	1/-024
b	1/-27	1-78	1/-04	1/-24
C	1/-7/	10-35	1/-708	1/-734
C0	02/-7	06-54	1/-404	1/-584
C1	1/-40	0-24	1/-11	1/-42
D	04-38	05-15	1/-50/	1/-53/
D0	02-35	03-05	1/-42/	1/-446
D1	2-32	4-38	1/-024	1/-105
d	4-33 ARB		1-103 ARB	
K	08-70	1/-21	1/-67/	1/-7/1
K0	3-0/	3-4/	1/-050	1/-066
O	2-45	2-55	1/-03/	1/-033
O0	6-5	6-28	1/-167	1/-180
P	4-28	5-1/	1/-101	1/-133
R	5-3	5-2/	1/-127	1/-137

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## Revision History

M

## IV RoHS Compliance

Q      b      b      b      bb      b      b      b      B      Q      b      Q

## REACH Compliance

b b b b b b b b b b

b b b b b b b b b b b b b