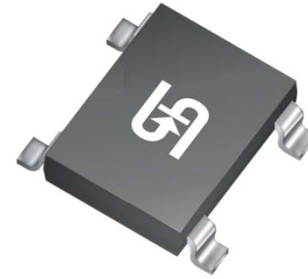


## 2A, 1000V Glass Passivated Bridge Rectifier

### FEATURES

- Glass passivated junction
- Ideal for automated placement
- Reliable low cost construction utilizing molded plastic technique
- High surge current capability
- Compliant to RoHS Directive 2011/65/EU and in accordance to WEEE 2002/96/EC
- Halogen-free according to IEC 61249-2-21



ABS



### MECHANICAL DATA

**Case:** Molded plastic body

Molding compound: UL flammability classification rating 94V-0

Moisture sensitivity level (MSL): level 1, per J-STD-020

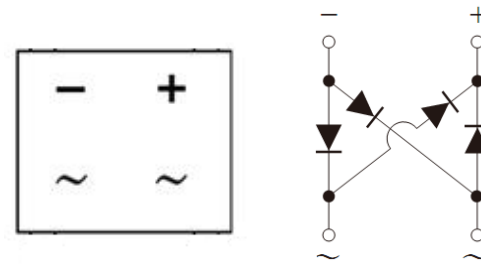
Packing code with suffix "G" means green compound (halogen-free)

**Terminal:** Matte tin plated leads, solderable per JESD22-B102

Meet JESD 201 class 1A whisker test

**Polarity:** Polarity as marked on the body

**Weight:** 93 mg (approximately)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T <sub>A</sub> =25°C unless otherwise noted)				
PARAMETER	SYMBOL		ABS20M-T	UNIT
Marking code			ABS20M	
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>		1000	V
Maximum RMS voltage	V <sub>RMS</sub>		700	V
Maximum DC blocking voltage	V <sub>DC</sub>		1000	V
Maximum average forward rectified current On glass-epoxy On aluminum substrate	I <sub>F(AV)</sub>		1.6 2.0	A
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>		50	A
Rating for fusing (t<8.3ms)	I <sup>2</sup> t		10.375	A <sup>2</sup> s
Maximum instantaneous forward voltage (Note 1)	I <sub>F</sub> = 1 A	T <sub>J</sub> =25°C	TYP 0.92	MAX 1.02
		T <sub>J</sub> =125°C	0.80	-
	I <sub>F</sub> = 2 A	T <sub>J</sub> =25°C	-	1.10
		T <sub>J</sub> =125°C	0.94	-
Maximum reverse current @ rated V <sub>R</sub>	T <sub>J</sub> =25°C		5	
	T <sub>J</sub> =125°C		150	
Typical thermal resistance	R <sub>θJL</sub>		30	
	R <sub>θJA</sub>		85	
Operating junction temperature range	T <sub>J</sub>		- 55 to +150	
Storage temperature range	T <sub>STG</sub>		- 55 to +150	

Note 1: Pulse test with PW=300μs, 1% duty cycle

**ORDERING INFORMATION**

PART NO.	PACKING CODE	PACKING CODE SUFFIX	PACKAGE	PACKING
ABS20M-T (Note 1)	RE	G	ABS	1,000 / 7" Plastic reel
	RG		ABS	5,000 / 13" Paper reel

Note 1: Whole series with green compound

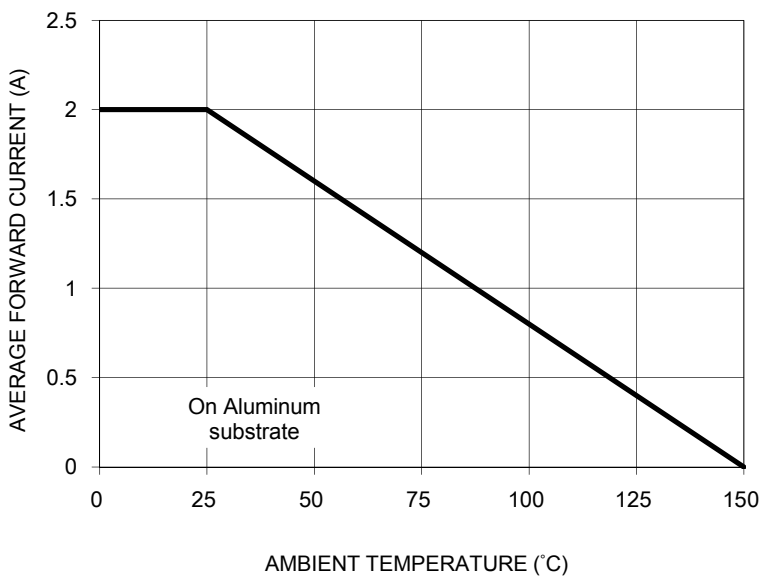
**EXAMPLE**

EXAMPLE P/N	PART NO.	PACKING CODE	PACKING CODE SUFFIX	DESCRIPTION
ABS20M-T REG	ABS20M-T	RE	G	Green compound

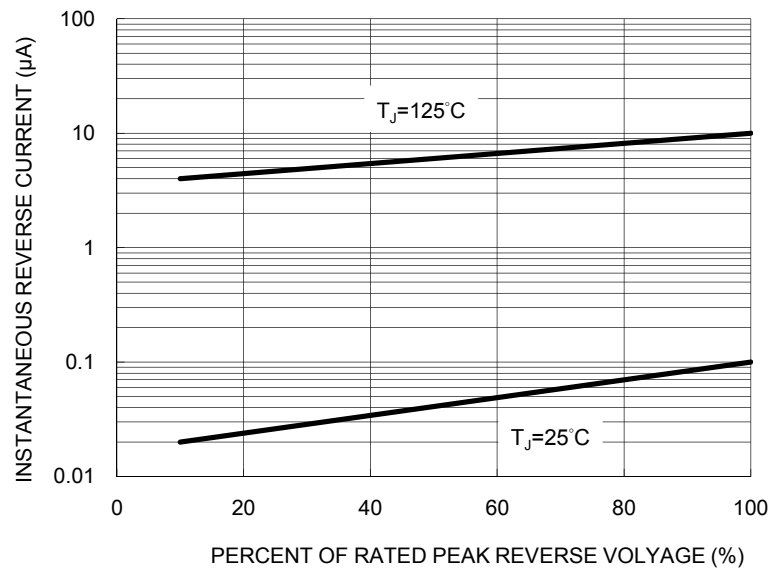
**RATINGS AND CHARACTERISTICS CURVES**

( $T_A=25^\circ\text{C}$  unless otherwise noted)

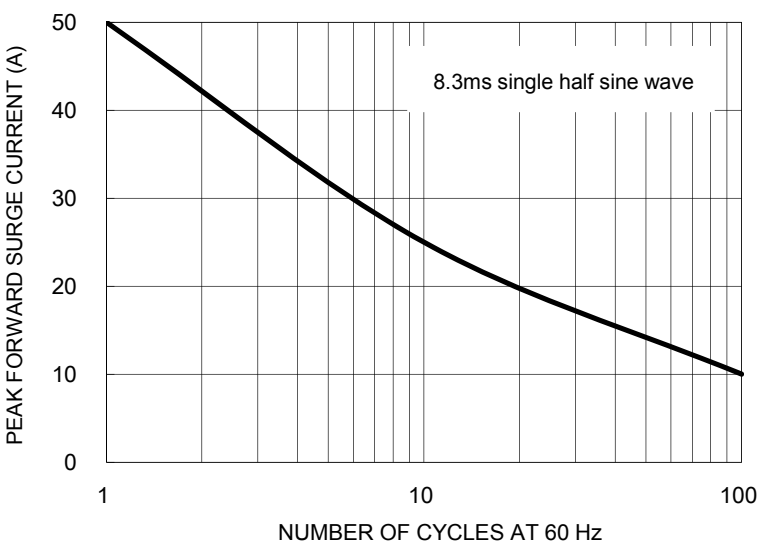
**FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE**



**FIG. 2 TYPICAL REVERSE CHARACTERISTICS**



**FIG. 3 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT**



**FIG. 4 TYPICAL JUNCTION CAPACITANCE**

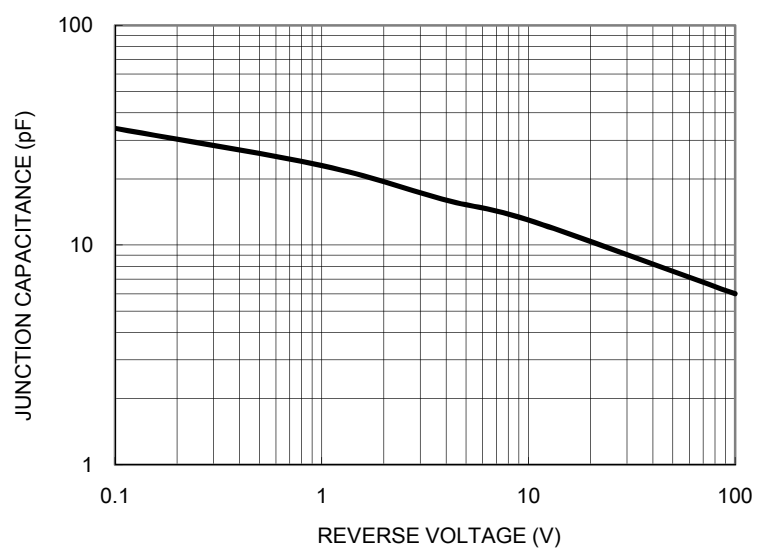
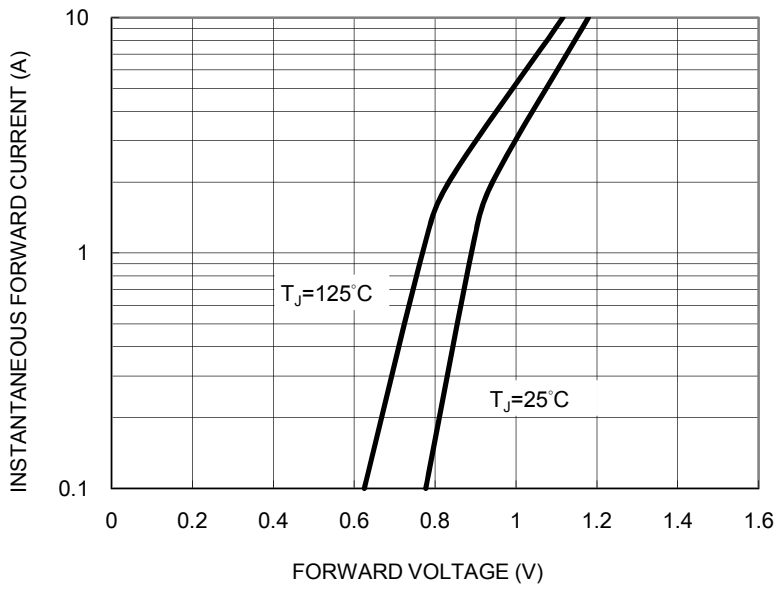


FIG. 5 TYPICAL FORWARD CHARACTERISTICS



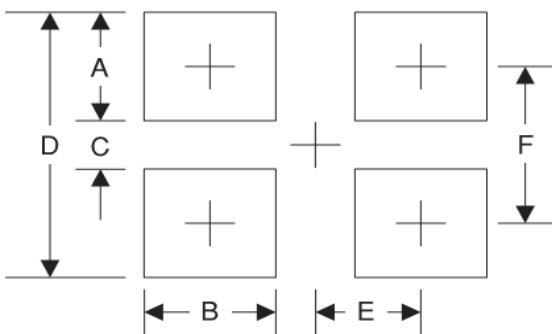
PACKAGE OUTLINE DIMENSIONS

ABS



DIM.	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
B	4.30	4.50	0.169	0.177
C	6.25	6.65	0.246	0.262
D	0.60	0.70	0.024	0.028
E	3.90	4.10	0.154	0.161
F	4.90	5.10	0.193	0.200
G	1.40	1.60	0.055	0.063
H	1.35	1.45	0.053	0.057
I	0.05	0.15	0.002	0.006
J	0.30	0.70	0.012	0.028
K	0.15	0.25	0.006	0.010

SUGGESTED PAD LAYOUT



Symbol	Unit (mm)	Unit (inch)
A	1.50	0.059
B	0.90	0.035
C	4.22	0.166
D	7.22	0.284
E	2.05	0.081
F	5.72	0.225

MARKING DIAGRAM



P/N = Marking code  
YWF = Date Code  
F = Factory Code

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