

**VOLTAGE RANGE: 200 - 1000V**

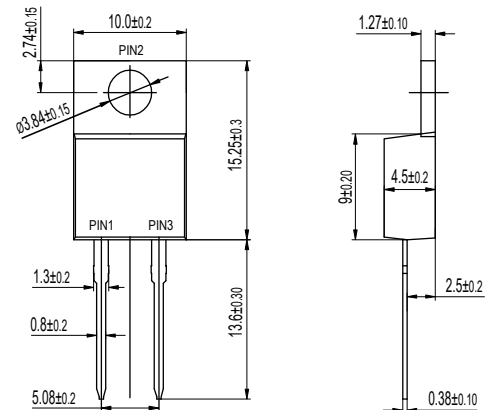
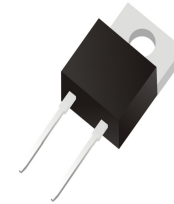
**CURRENT: 20A**

### Features

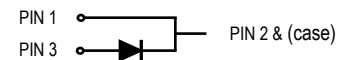
- Glass passivated chip junctions
- High Speed recovery time for switching mode application
- High Forward Surge Capability
- Low Reverse Current
- Lead free in compliance with EU RoHS 2011/65/EU directive

### Mechanical Data

- Circuit figure: Single positive
- Leads: Solderable per mil-std-202, Method 208
- Polarity: as marked
- Mounting torque: 5 in-lbs maximum
- Terminals: Puretin plated
- Weight: TO-220AC 1.80 grams



TO-220AC



### Maximum Ratings And Electrical Characteristics $T_A = 25^\circ\text{C}$

RATINGS	SYMBOL	MUR 2020	MUR 2030	MUR 2040	MUR 2060	MUR 2080	MUR 20100	UNIT
Maximum repetitive reverse voltage	VRRM	200	300	400	600	800	1000	V
Maximum RMS voltage	VRMS	140	210	280	420	560	700	V
Maximum DC blocking voltage	VDC	200	300	400	600	800	1000	V
Maximum average forward current	I <sub>AV</sub>	20						A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	300						A
Typical thermal resistance per diode (Note 1)	R <sub>θ-JC</sub>	2.5						°C/W
Operating junction temperature range	T <sub>J</sub>	-55 to +150						°C
Storage temperature range	T <sub>STG</sub>	-55 to +150						°C
Maximum forward voltage per leg at 20A	V <sub>F</sub>	1.00	1.30	1.70				V
Maximum average reverse current at rated DC blocking voltage T <sub>J</sub> =25°C T <sub>J</sub> =125°C	I <sub>R</sub>	5 250						μA
Maximum reverse recovery time (Note 2)	T <sub>RR</sub>	50				100		nS

Notes: 1. Thermal resistance from junction to case.  
2. Test conditions: I<sub>F</sub>=0.5A, I<sub>R</sub>=1.0A, I<sub>RR</sub>=0.25A.

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

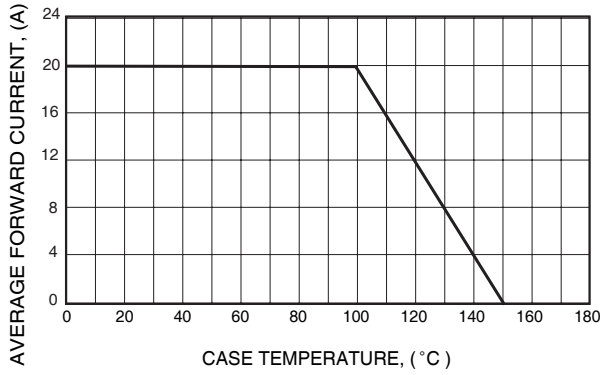


FIG. 3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

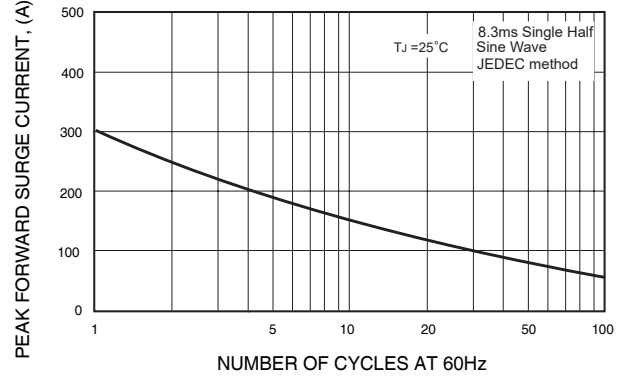


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

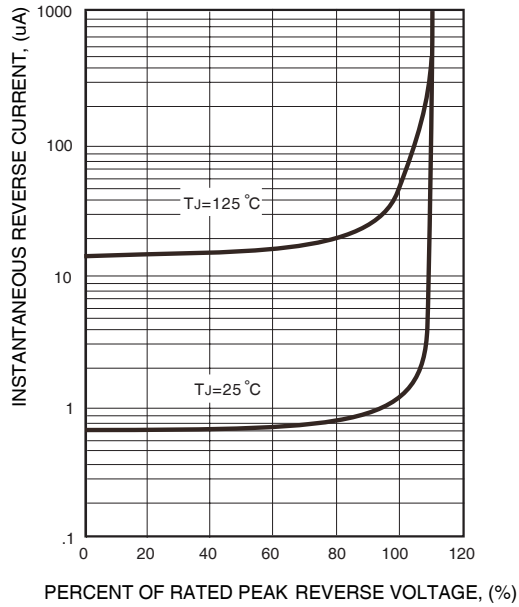


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

