

# MURS180-A

## ULTRAFAST EFFICIENT GLASS PASSIVATED RECTIFIER

VOLTAGE: 800V

CURRENT: 1.0A

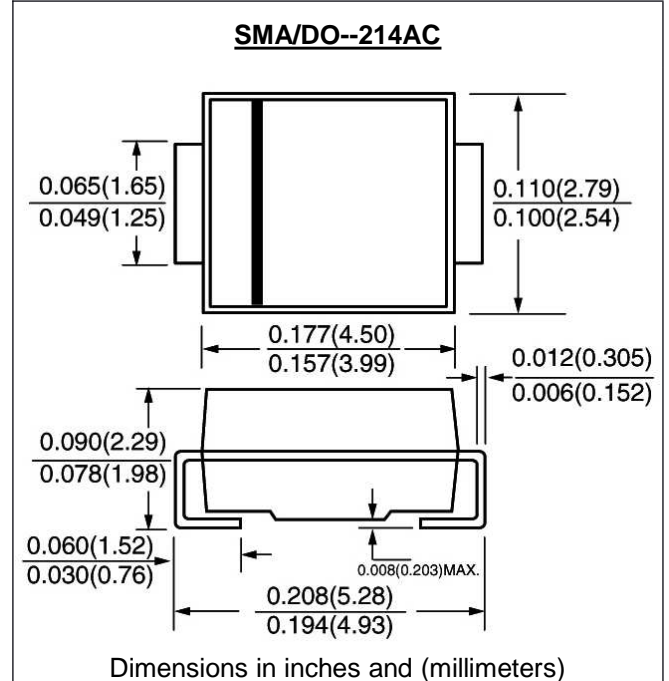


### FEATURE

Ultrafast Nanosecond Recovery Times  
150°C Operating Junction Temperature  
Low Forward Voltage  
Low Leakage Current  
High Temperature Glass Passivated Junction

### Mechanical Characteristics

Case: JEDEC SMA/DO-214AC molded plastic body  
Terminals: Solder plated, solderable per MIL-STD-750, Method 2026  
Polarity: Color band denotes cathode end  
Mark: M180



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated)

	SYMBOL	MURS180-A	units
Maximum Recurrent Peak Reverse Voltage	V <sub>rrm</sub>	800	V
Maximum RMS Voltage	V <sub>rms</sub>	640	V
Maximum DC blocking Voltage	V <sub>dc</sub>	800	V
Maximum Average Forward Rectified Current 3/8"lead length at Ta =55°C	I <sub>f(av)</sub>	1.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I <sub>fsm</sub>	35	A
Maximum Forward Voltage at rated Forward Current and 25°C	V <sub>f</sub>	1.75	V
Maximum DC Reverse Current Ta =25°C	I <sub>r</sub>	10	μA
at rated DC blocking voltage Ta =125°C		50	μA
Maximum Reverse Recovery Time (Note 1)	T <sub>rr</sub>	75	nS
Typical Junction Capacitance (Note 2)	C <sub>j</sub>	25	pF
Typical Thermal Resistance (Note 3)	R <sub>th(ja)</sub>	50	°C /W
Storage and Operating Temperature Range	T <sub>stg</sub> , T <sub>j</sub>	-55 to +150	°C

Note:

1. Reverse Recovery Condition I<sub>f</sub> =0.5A, I<sub>r</sub> =1.0A, I<sub>rr</sub> =0.25A
2. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
3. Thermal Resistance from Junction to Ambient at 3/8"lead length, P.C. Board Mounted

RATINGS AND CHARACTERISTIC CURVES MURS180-A

Fig. 1 – Forward Current Derating Curve

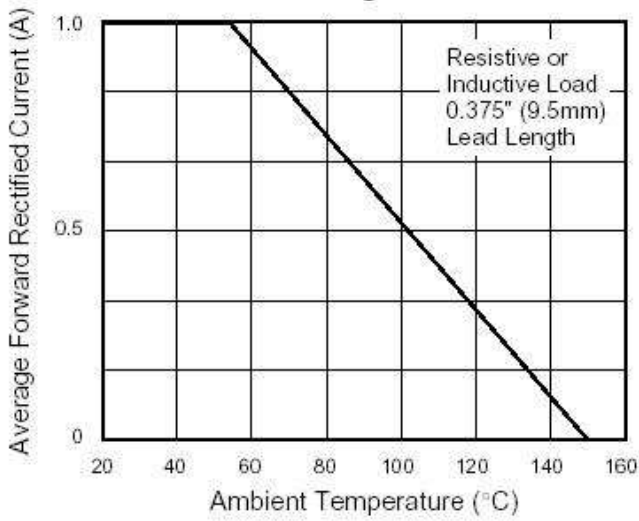


Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current

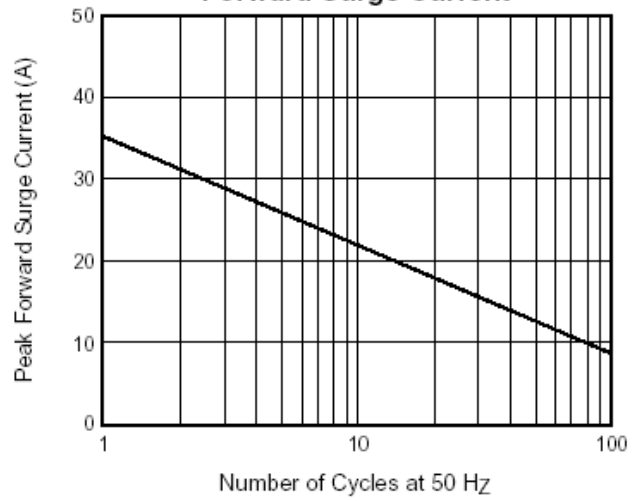


Fig. 3 – Typical Instantaneous Forward Characteristics

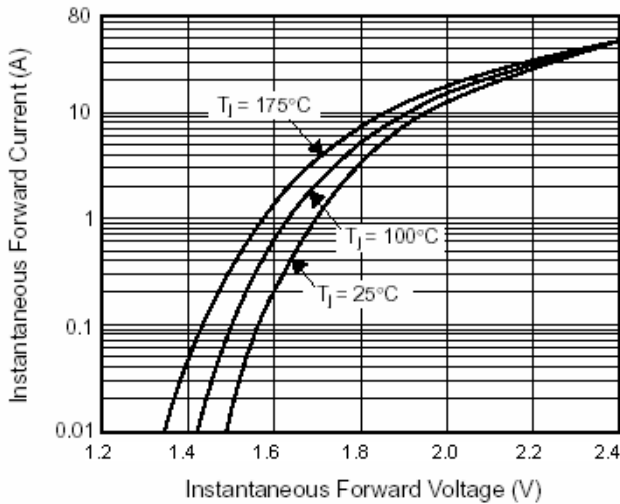


Fig. 4 – Typical Reverse Leakage Characteristics

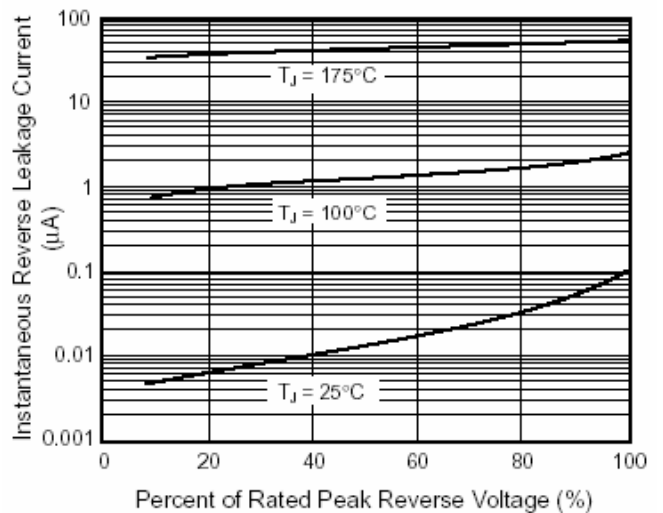


Fig. 5 – Typical Junction Capacitance

