

# MURS220-18C

## SURFACE MOUNT ULTRAFAST GLASS PASSIVATED RECTIFIER

VOLTAGE: 200V

CURRENT: 2.0A



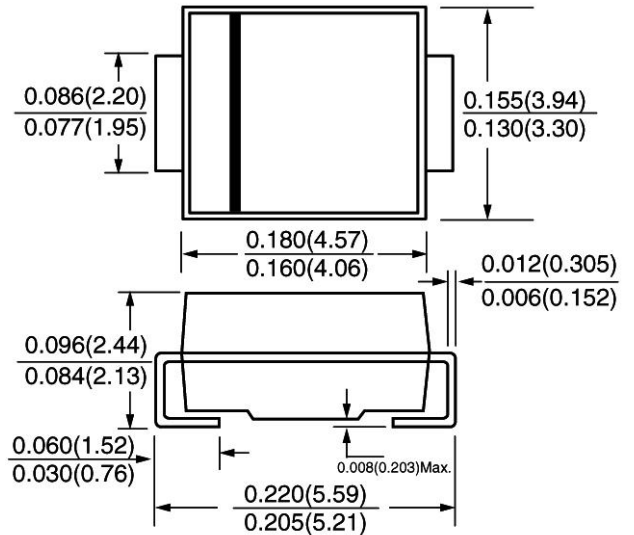
### FEATURE

Ideal for surface mount pick and place application  
Low profile package  
Built-in strain relief  
High surge capability  
High temperature soldering guaranteed: 260°C/10sec  
Glass passivated chip  
Ultrafast recovery time for high efficiency  
Meet Standard of AEC-Q101

### MECHANICAL DATA

Terminal: Solder plated, solderable per J-STD-002  
Case: Molded with UL-94 class V-0 recognized Flame Retardant Epoxy  
Polarity: color band denotes cathode

### SMB / DO-214AA



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	Symbol	MURS220-18C	units
Maximum Recurrent Peak Reverse Voltage	V <sub>rrm</sub>	200	V
Maximum RMS Voltage	V <sub>rms</sub>	140	V
Maximum DC blocking Voltage	V <sub>dc</sub>	200	V
Maximum Average Forward Rectified at T <sub>I</sub> =125°C	I <sub>f(av)</sub>	2.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I <sub>fsm</sub>	40	A
Maximum Forward Voltage at rated Forward current	V <sub>f</sub>	0.95	V
Maximum Reverse Recovery Time (Note 1)	T <sub>rr</sub>	25	nS
Maximum DC Reverse Current at rated DC blocking voltage	I <sub>r</sub>	5.0	µA
Typical Junction Capacitance (Note 2)	C <sub>j</sub>	30.0	pF
Typical Thermal Resistance (Note 3)	R <sub>th(jl)</sub>	13.0	°C/W
Storage and Operating Temperature	T <sub>j</sub> , T <sub>stg</sub>	-55 to +150	°C

Note:

- Reverse Recovery Condition I<sub>f</sub>=0.5A, I<sub>r</sub>=1.0A, I<sub>rr</sub>=0.25A
- Measured at 1.0 MHz and applied voltage of 4.0Vdc
- Thermal Resistance from Junction to terminal mounted on 5x5mm copper pad area

RATINGS AND CHARACTERISTIC CURVES MURS220-18C

Fig. 1 – Forward Current Derating Curve

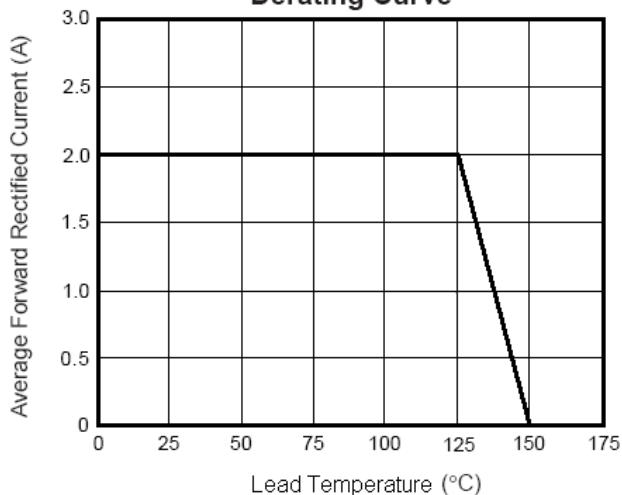


Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current

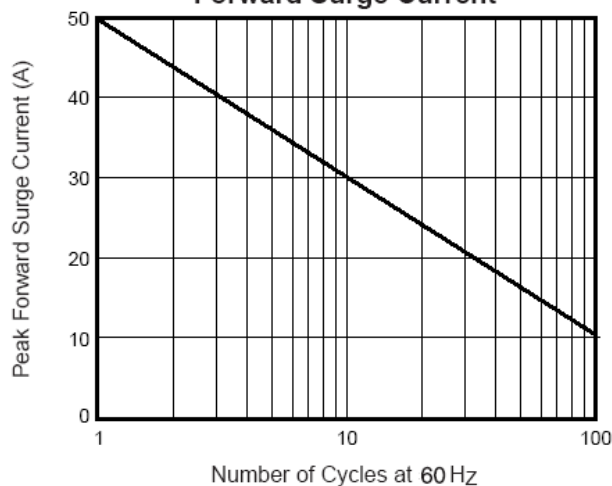


Fig. 3 – Typical Instantaneous Forward Characteristics

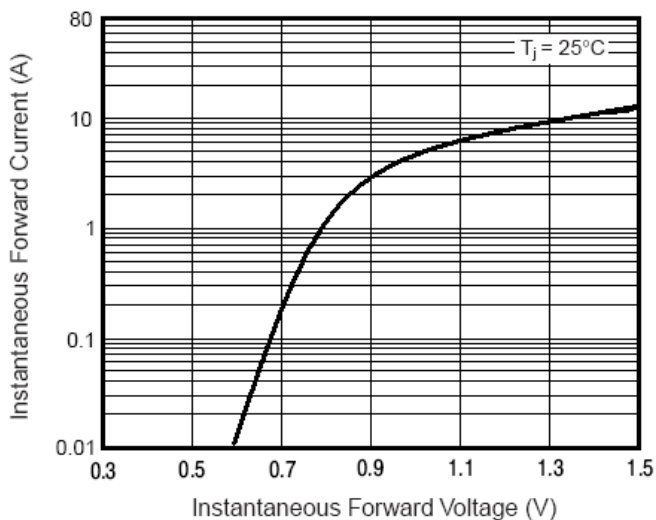


Fig. 4 – Typical Reverse Leakage Characteristics

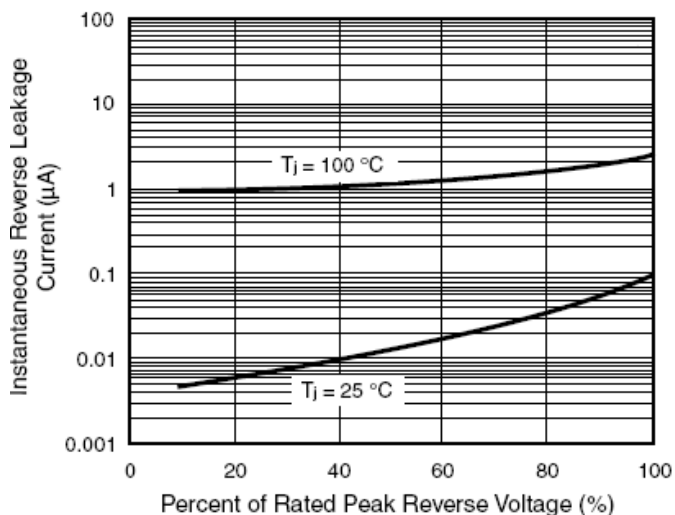


Fig. 5 – Typical Junction Capacitance

