

# MURS205 THRU MURS260

## SURFACE MOUNT ULTRAFAST GLASS PASSIVATED RECTIFIER

VOLTAGE: 50 to 600V

CURRENT: 2.0A

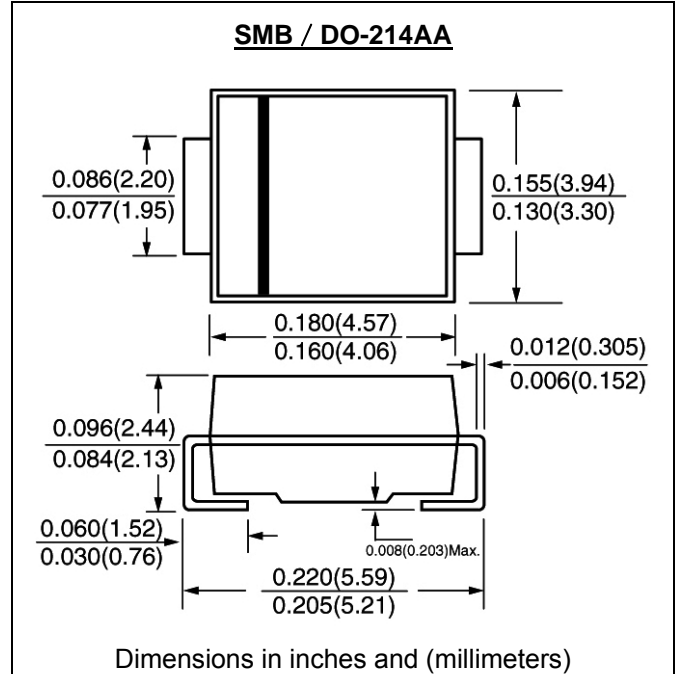


### FEATURE

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/at terminals  
 Glass passivated chip  
 Ultrafast recovery time for high efficiency

### MECHANICAL DATA

Terminal: Plated axial leads solderable per MIL-STD 202E, method 208C  
 Case: Molded with UL-94 class V-0 recognized Flame Retardant Epoxy  
 Polarity: color band denotes cathode



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half-wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated, for capacitive load, derate current by 20%)

	SYMBOL	MURS 205	MURS 210	MURS 220	MURS 230	MURS 240	MURS 260	units
Maximum Recurrent Peak Reverse Voltage	V <sub>rrm</sub>	50	100	200	300	400	600	V
Maximum RMS Voltage	V <sub>rms</sub>	35	70	140	210	280	420	V
Maximum DC blocking Voltage	V <sub>dc</sub>	50	100	200	300	400	600	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>	50	40	35.0				A
Maximum Forward Voltage at rated Forward current	V <sub>f</sub>	0.94	0.95	1.30		1.45		V
Maximum Reverse Recovery Time (Note 1)	T <sub>rr</sub>	20	25	50				nS
Maximum DC Reverse Current at rated DC blocking voltage	I <sub>r</sub>	5.0						μA
		150.0						
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 4.0V<sub>dc</sub>
- Thermal Resistance from Junction to terminal mounted on 5×5mm copper pad area

RATINGS AND CHARACTERISTIC CURVES MURS205 THRU MURS260

Fig. 1 – Forward Current Derating Curve

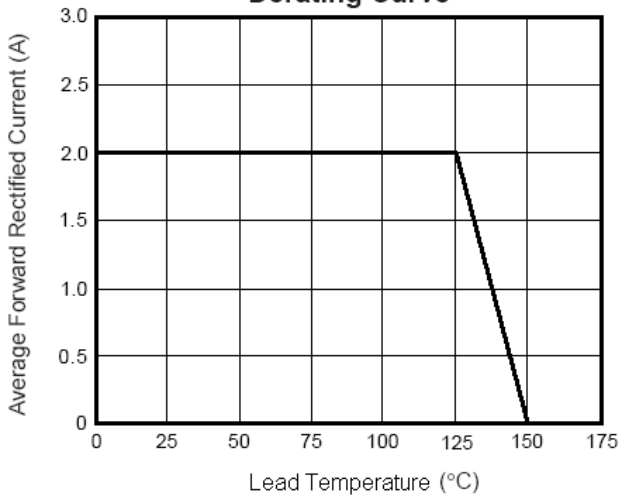


Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current

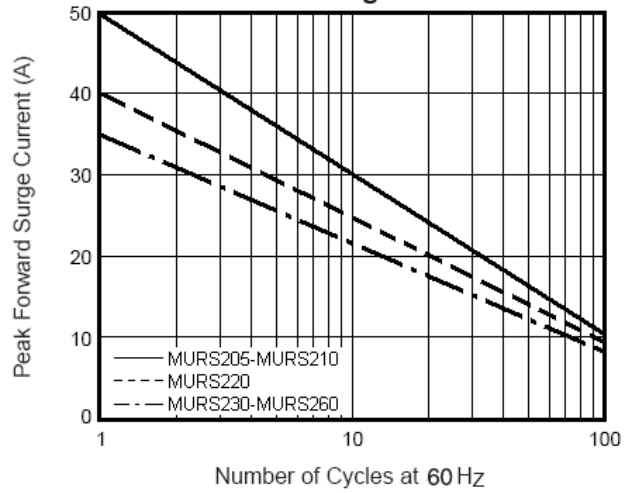


Fig. 3 – Typical Instantaneous Forward Characteristics

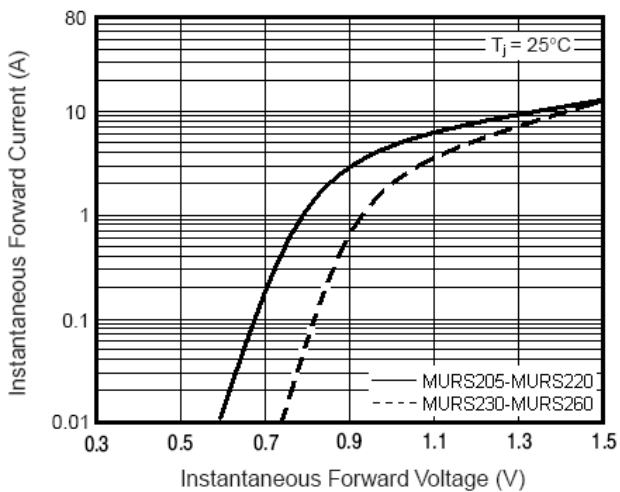


Fig. 4 – Typical Reverse Leakage Characteristics (MUR160)

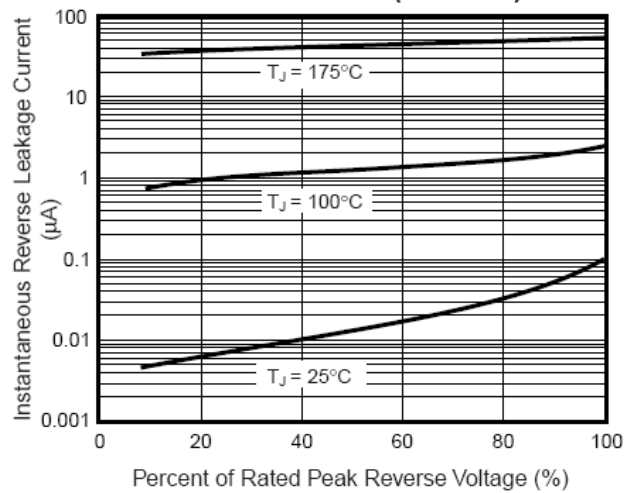


Fig. 5 – Typical Junction Capacitance

