

# MUR280S

## GLASS PASSIVATED JUNCTION Ultra fast Plastic Rectifiers

VOLTAGE: 800V

CURRENT: 2.0A



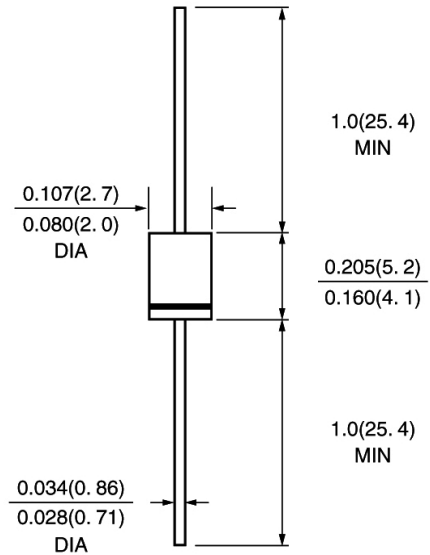
### FEATURE

Plastic package has Underwriters Laboratories Flammability Classification 94V-0  
Ideally suited for use in very high frequency switching power supplies, inverters and as free wheeling diodes  
Ultra fast recovery time for high efficiency  
Excellent high temperature switching  
Glass passivated junction  
High temperature soldering guaranteed:  
250°C/10 seconds, 0.375" (9.5mm) lead length, 5 lbs. (2.3kg) tension

### MECHANICAL DATA

Case: JEDEC DO-41 molded plastic body over passivated chip  
Terminals: Plated axial leads, solderable per MIL-STD-202E, Method 208C  
Polarity: Color band denotes cathode end  
Mounting Position: Any

### DO-41/DO-204AL



Dimensions in inches and (millimeters)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	SYMBOL	MUR280S	units
Maximum Recurrent Peak Reverse Voltage	V <sub>rrm</sub>	800	V
Maximum RMS Voltage	V <sub>rms</sub>	560	
Maximum DC blocking Voltage	V <sub>dc</sub>	800	V
Maximum Average Forward Rectified at=60°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>	35	A
Maximum Forward Voltage at rated Forward Current and 25°C	V <sub>f</sub>	1.75	V
Maximum Reverse Recovery Time (Note 1)	T <sub>rr</sub>	75	nS
Typical thermal resistance junction to ambient (Note 2)	R <sub>th(ia)</sub>	50	°C/W
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =125°C	I <sub>r</sub>	10 100	μA μA
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. Thermal Resistance from Junction to Ambient at 3/8" lead length, P.C. Board Mounted

RATINGS AND CHARACTERISTIC CURVES MUR280S

Fig. 1 – Forward Current Derating Curve

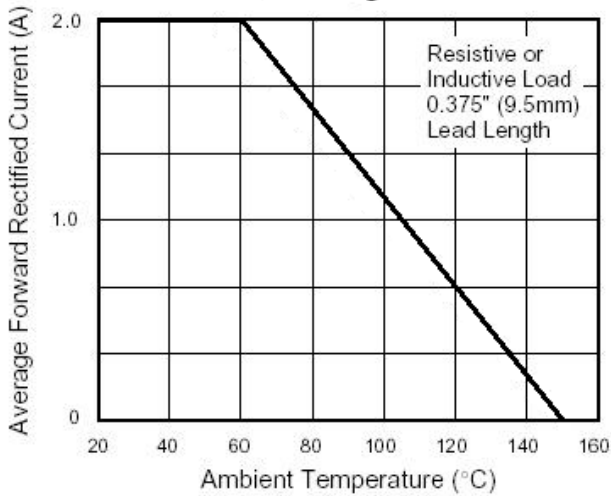


Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current

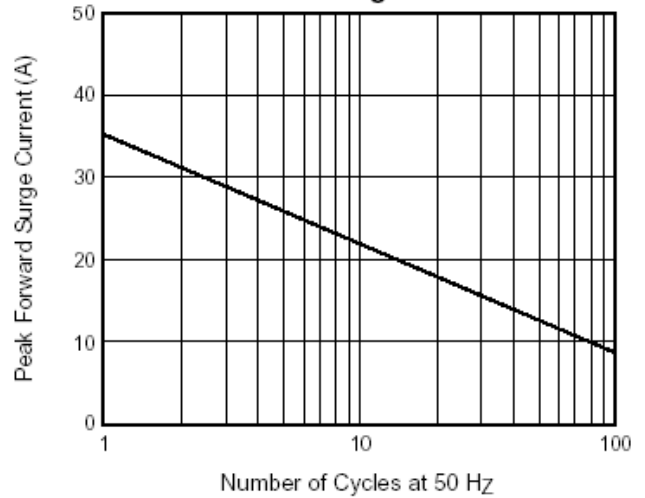


Fig. 3 – Typical Instantaneous Forward Characteristics

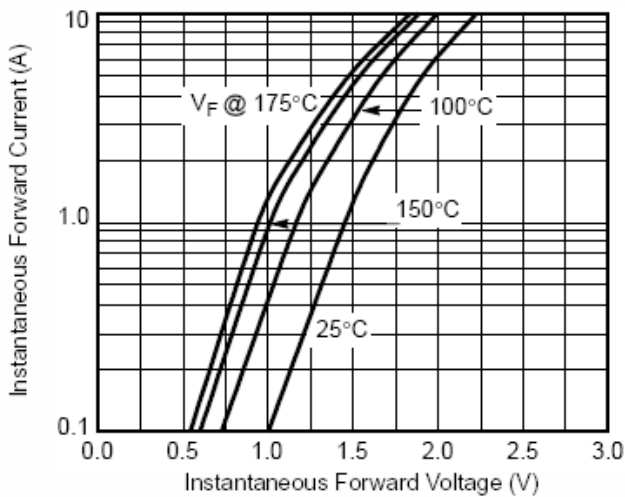


Fig. 4 – Typical Reverse Leakage Characteristics

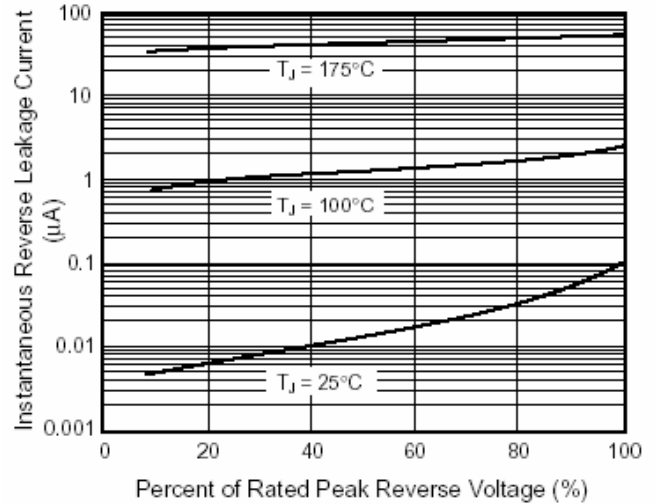


Fig. 5 – Typical Junction Capacitance

