

# MURS340-B THRU MURS360-B

## SURFACE MOUNT ULTRAFAST RECTIFIER

VOLTAGE: 400V TO 600V

CURRENT: 3.0A



### FEATURE

Ideally suited for use in very high frequency switching power supplies, inverters and as free wheeling diodes  
Ultrafast recovery time for high efficiency  
High surge capability  
High temperature soldering guaranteed  
260°C/10sec/at terminals  
Glass passivated chip

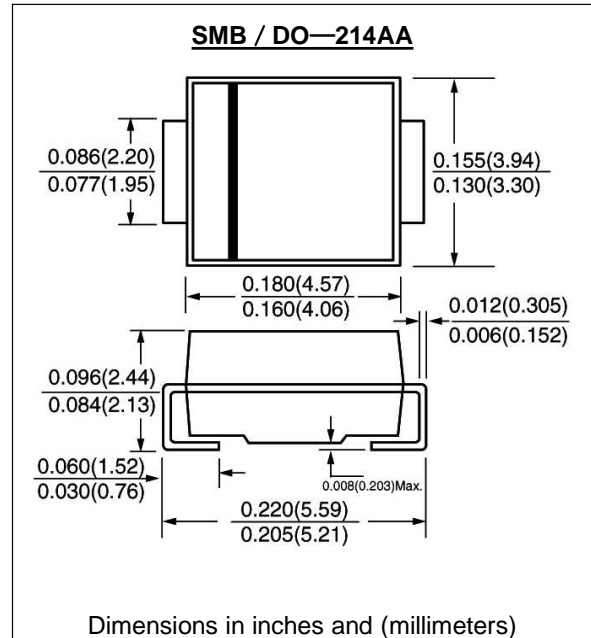
### MECHANICAL DATA

Terminals: Solder plated, solderable per MIL-STD-750, Method 2026

Case: Molded with UL-94 class V-0 recognized Flame Retardant Epoxy

Polarity: Color band denotes cathode end

Mark: M340B M360B



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

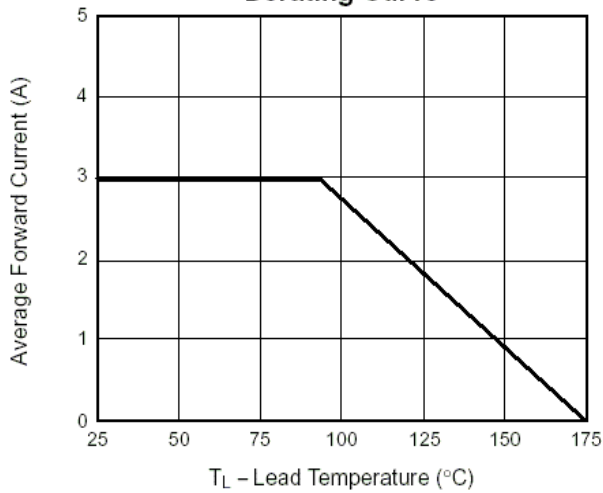
(single-phase, half-wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated, for capacitive load, derate current by 20%)

	SYMBOL	MURS340-B	MURS360-B	units
Maximum Recurrent Peak Reverse Voltage	V <sub>rrm</sub>	400	600	V
Maximum RMS Voltage	V <sub>rms</sub>	280	420	V
Maximum DC blocking Voltage	V <sub>dc</sub>	400	600	V
Maximum Average Forward Rectified Current 3/8" lead length at T <sub>j</sub> = 90°C	I <sub>f(av)</sub>	3.0		A
Peak Forward Surge Current 8.3ms single half sine- wave superimposed on rated load	I <sub>fsm</sub>	125.0		A
Maximum Instantaneous Forward Voltage at rated forward current T <sub>j</sub> = 25°C	V <sub>f</sub>	1.25		V
Maximum DC Reverse Current at rated DC blocking voltage	I <sub>r</sub>	10.0 50.0		μA
Maximum Reverse Recovery Time (Note 1)	T <sub>rr</sub>	50		nS
Typical Junction Capacitance (Note 2)	C <sub>j</sub>	50		pF
Typical Thermal Resistance, junction to lead	R <sub>th(jl)</sub>	11		°C/W
Storage and Operating Junction Temperature	T <sub>stg</sub> , T <sub>j</sub>	-55 to +175		°C

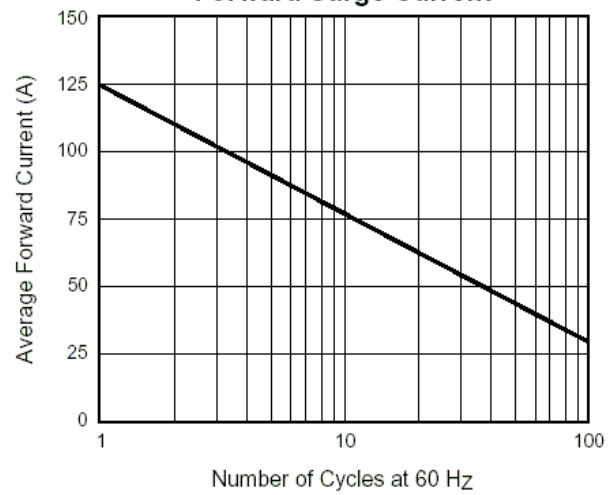
Note:

- 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 reverse voltage of 4.0Vdc

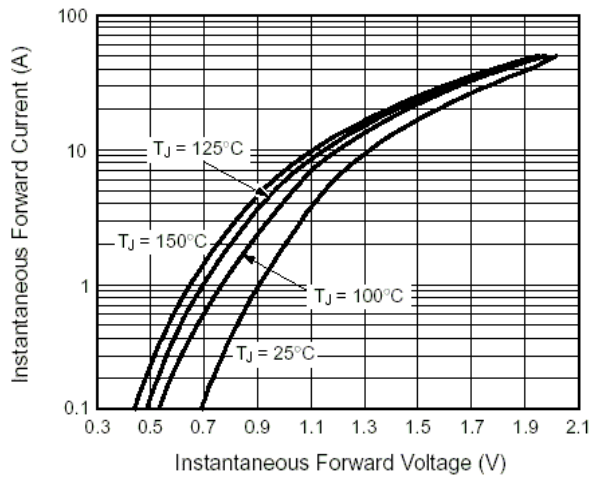
**Fig. 1 – Forward Current Derating Curve**



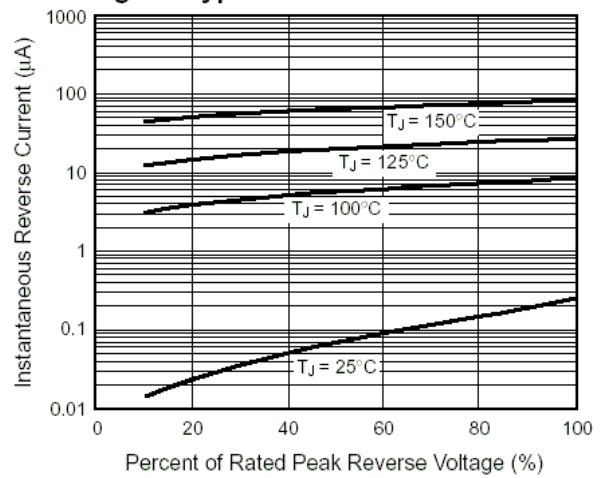
**Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current**



**Fig. 3 – Typical Instantaneous Forward Characteristics**



**Fig. 4 – Typical Reverse Characteristics**



**Fig. 5 – Typical Junction Capacitance**

