

# MURS320-B THRU MURS360-B

## SURFACE MOUNT ULTRAFAST RECTIFIER

VOLTAGE: 200V TO 600V

CURRENT: 3.0A



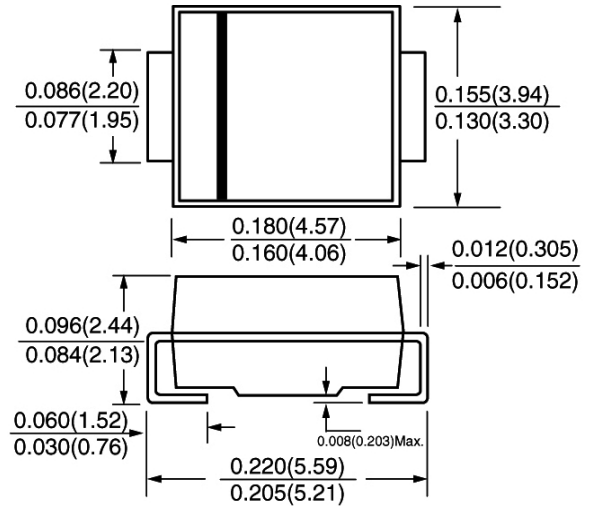
### FEATURE

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 j-std-002  
Case: Molded with UL-94 class V-0 recognized Flame Retardant Epoxy  
Polarity: Color band denotes cathode end  
Mark: M320B M340B M360B

### SMB / DO-214AA



Dimensions in inches and (millimeters)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

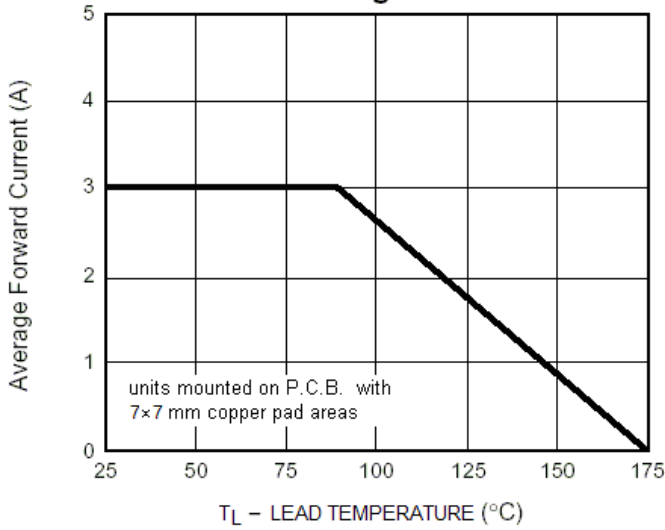
(single-phase, half-wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated)

	SYMBOL	MURS320-B	MURS340-B	MURS360-B	units
Maximum Recurrent Peak Reverse Voltage	V <sub>rrm</sub>	200	400	600	V
Maximum RMS Voltage	V <sub>rms</sub>	140	280	420	V
Maximum DC blocking Voltage	V <sub>dc</sub>	200	400	600	V
Maximum Average Forward Rectified Current 3/8"lead length at T <sub>L</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			A
Maximum Instantaneous Forward Voltage at rated forward current T <sub>J</sub> =25°C	V <sub>f</sub>	0.875	1.25		V
Maximum DC Reverse Current at rated DC blocking voltage Ta =25°C Ta =125°C	I <sub>r</sub>	5.0 50	10 50		µA
Maximum Reverse Recovery Time (Note1 )	T <sub>rr</sub>	25	50		nS
Typical Junction Capacitance (Note 2)	C <sub>j</sub>	50			pF
Typical Thermal Resistance (Note 3)	R <sub>th(jl)</sub> R <sub>th(ja)</sub>	11 71			°C/W
Storage and Operating Junction Temperature	T <sub>stg</sub> , T <sub>j</sub>	-55 to +175			°C

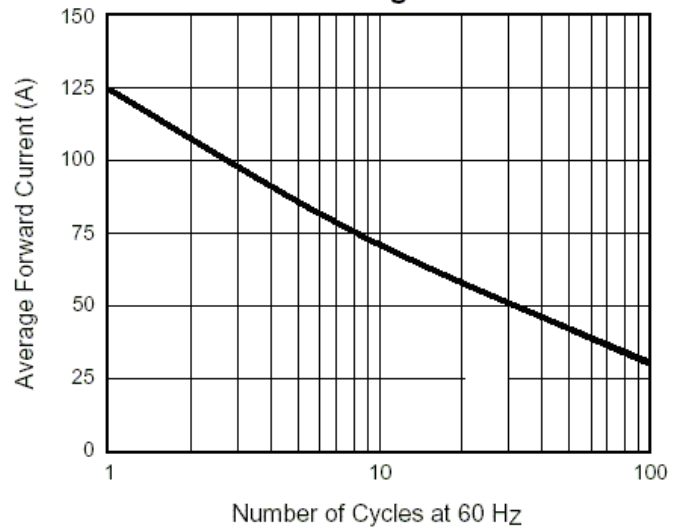
#### Note:

- 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
- Units mounted on P.C.B. with 7×7mm copper pad areas

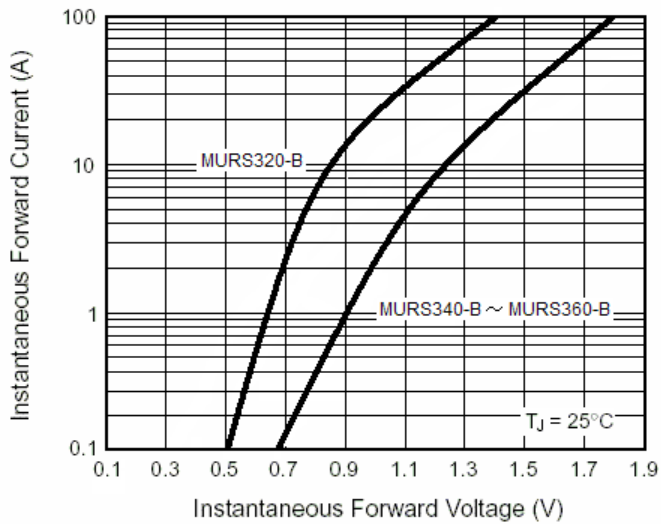
**Fig. 1 – Forward Current Derating Curve**



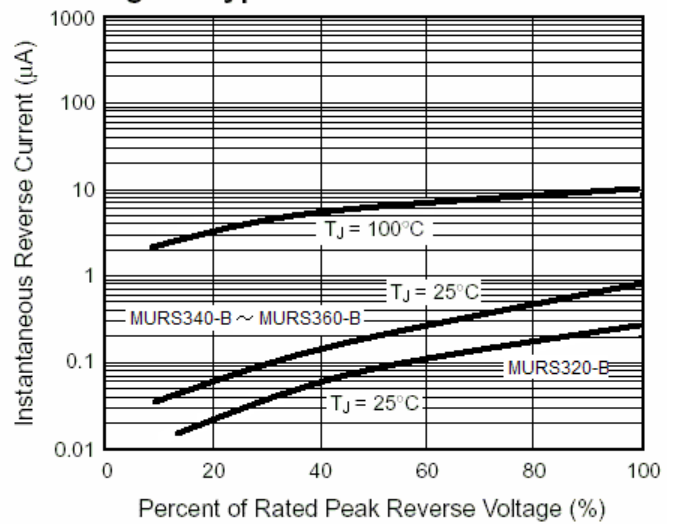
**Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current**



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



**Fig. 4 – Typical Reverse Characteristics**



**Fig. 5 – Typical Junction Capacitance**

