

## ULTRAFAST RECTIFIER MURS320B-360B

### FEATURES

- \* High reliability
- \* Low leakage
- \* Low forward voltage
- \* High current capability
- \* Ultrafast switching speed
- \* High surge capability
- \* Good for switching mode circuit

### MECHANICAL DATA

Case: SMC Molded plastic

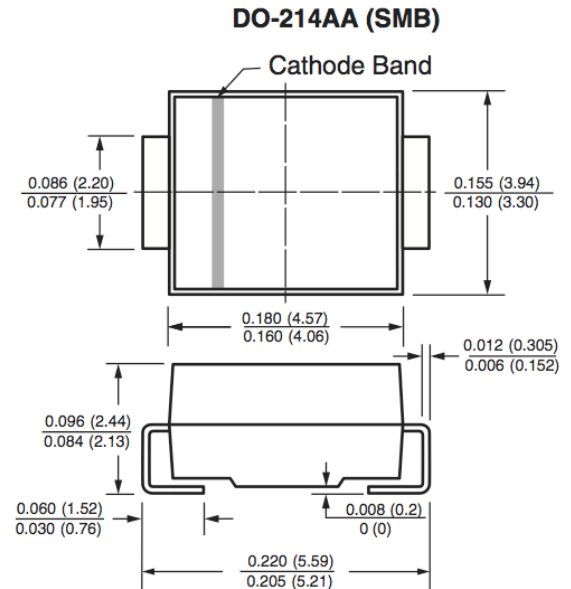
Epoxy: UL94V-O rate flame retardant

Lead: Lead Formed for Surface Mount

Polarity: Color band denotes cathode end

Mounting position: Any

Weight: 0.24 gram



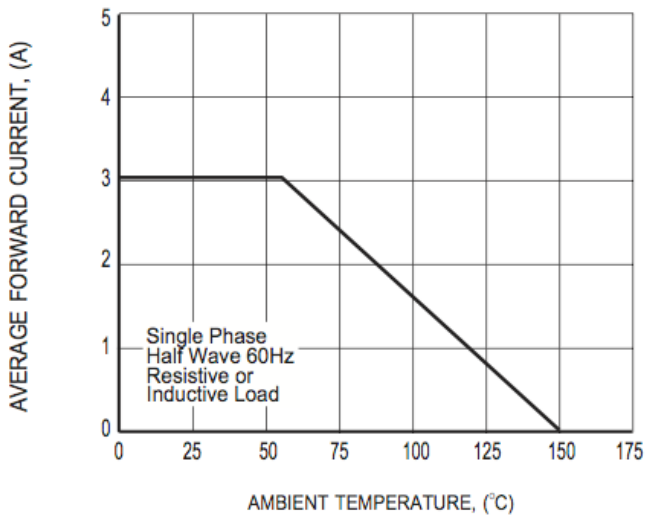
	SYMBOL	MURS320B	MURS340B	MURS360B	UNITS
Maximum repetitive peak reverse voltage	$V_{RRM}$	200	400	600	Volts
Maximum RMS voltage	$V_{RMS}$	140	280	420	Volts
Maximum DC blocking voltage	$V_{DC}$	200	400	600	Volts
Maximum average forward rectified current	$I_{O(AV)}$	3.0			Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	75.0			Amps
Maximum instantaneous forward voltage at 3.0A DC	$V_F$	0.9	1.3		Volts
Maximum DC reverse current at rated DC blocking voltage	$I_R$	$T_A=25^{\circ}C$ 5.0	5.0		$\mu A$
		$T_A=125^{\circ}C$ 100.0	100.0		
Typical junction capacitance (NOTE 1)	$C_J$	15.0			pF
Typical reverse recovery time (NOTE 2)	$t_{rr}$	50.0	75.0		ns
Typical thermal resistance (NOTE 3)	$R_{\theta JA}$	80.0			$^{\circ}C/W$
Operating junction and storage temperature range	$T_J, T_{STG}$	-55 to +150			$^{\circ}C$

#### NOTES:

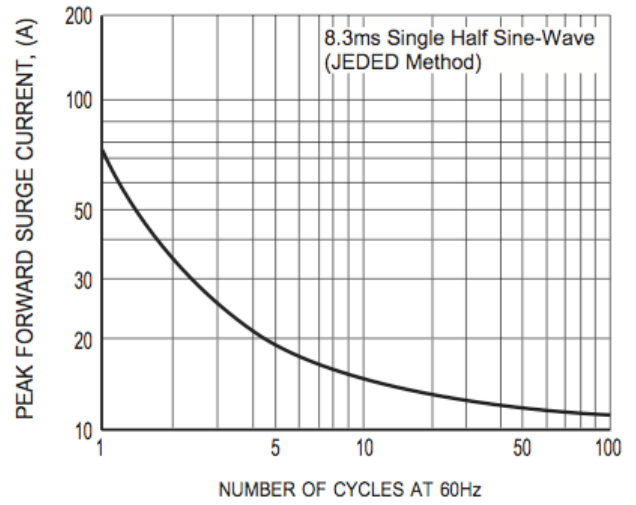
- (1) Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.
- (2) Reverse recovery test conditions:  $I_F=0.5A$ ,  $I_R=1.0A$ ,  $IRR=0.25A$
- (3) Thermal resistance from junction to ambient

## Ratings and Characteristic Curves

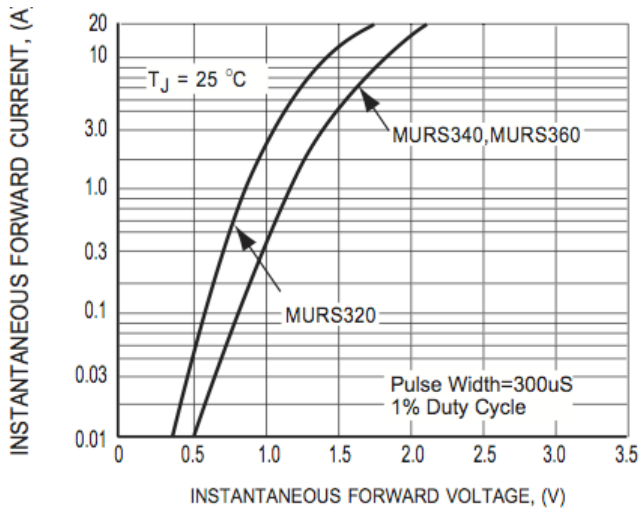
**FIG. 1 FORWARD DERATING CURVE**



**FIG. 2 PEAK FORWARD SURGE CURRENT**



**FIG. 3 TYPICAL FORWARD CHARACTERISTICS**



**FIG. 4 TYPICAL REVERSE CHARACTERISTICS**

