

## SUPER FAST RECTIFIERS

VOLTAGE RANGE: 100--- 600 V

CURRENT: 4.0 A

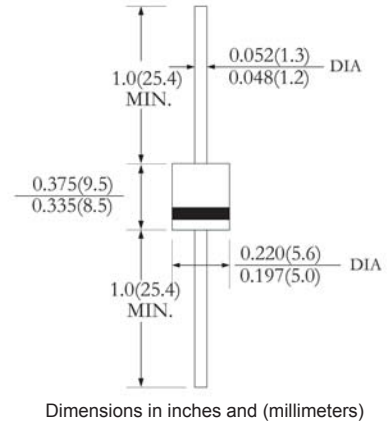
### FEATURES

- Low forward voltage drop
- High current capability
- High reliability
- Low Power Loss, High Efficiency
- Ultrafast 35second Recovery times

### MECHANICAL DATA

- Case: Molded plastic
- Epoxy: UL 94V-0 rate flame retardant
- Lead: Axial leads, solderable per MIL-STD-202, method 208 guranteed
- Polarity: Color band denotes cathode end
- Mounting position: Any

### DO-27



### MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)Single phase, half wave, 60 Hz, resistive or inductive load.  
For capacitive load, derate by 20%.

		MUR410	MUR420	MUR430	MUR440	MUR450	MUR460	UNITS
Maximum recurrent peak reverse voltage	$V_{RRM}$	100	200	300	400	500	600	V
Maximum RMS voltage	$V_{RMS}$	70	140	210	280	350	420	V
Maximum DC blocking voltage	$V_{DC}$	100	200	300	400	500	600	V
Maximum Average Forward Rectified Current, 375"(9.5mm) Lead Length at $T_A=75^\circ\text{C}$	$I_{F(AV)}$	4.0						A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	120.0						A
Maximum Instantaneous Forward Voltage at 4.0A	$V_F$	1.0		1.3		1.7		V
Maximum reverse current at rated DC blocking voltage	@ $T_A=25^\circ\text{C}$	10.0						$\mu\text{A}$
	@ $T_A=125^\circ\text{C}$	50.0						
Maximum reverse recovery time (Note3)	$t_{rr}$	50						ns
Typical junction capacitance (Note1)	$C_J$	90						pF
Typical thermal resistance (Note2)	$R_{\theta JA}$	20						$^\circ\text{C/W}$
Operating junction temperature range	$T_j$	-50 ---- + 125						$^\circ\text{C}$
Storage temperature range	$T_{STG}$	-50 ---- + 150						$^\circ\text{C}$

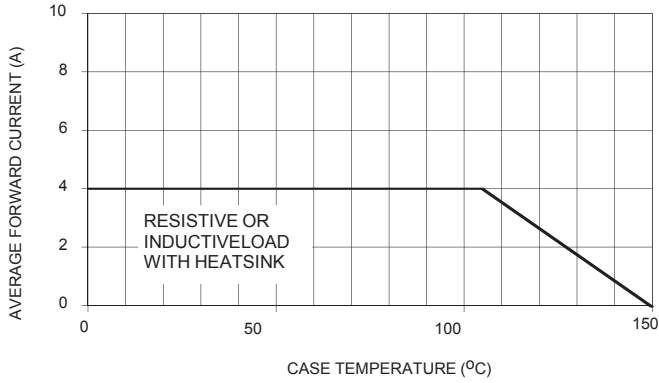
**Note:** 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

2. Leads maintained at ambient temperature at a distance of 9.5mm from the case

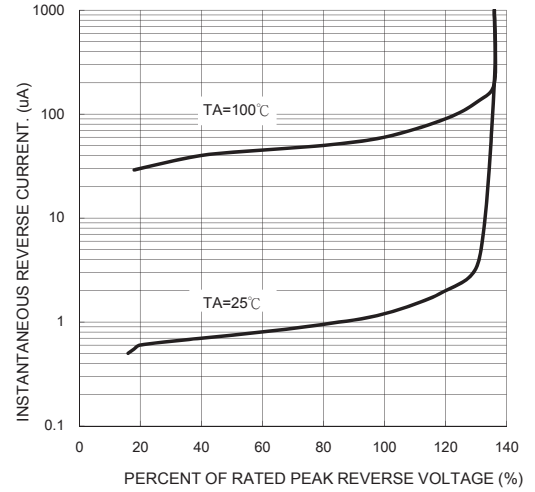
3. Reverse recovery condition  $I_F=0.5\text{A}, I_R=1.0\text{A}, I_{rr}=0.25\text{A}$

# RATINGS AND CHARACTERISTIC CURVES

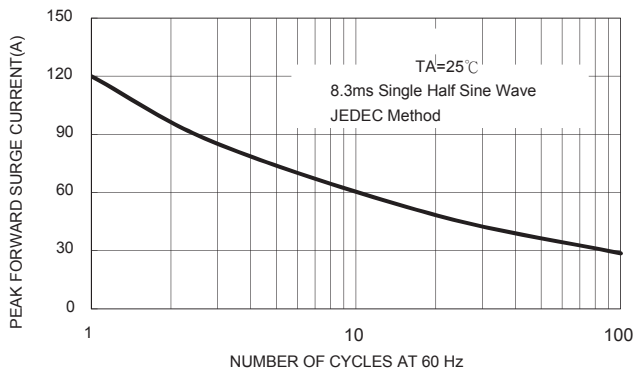
**FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE**



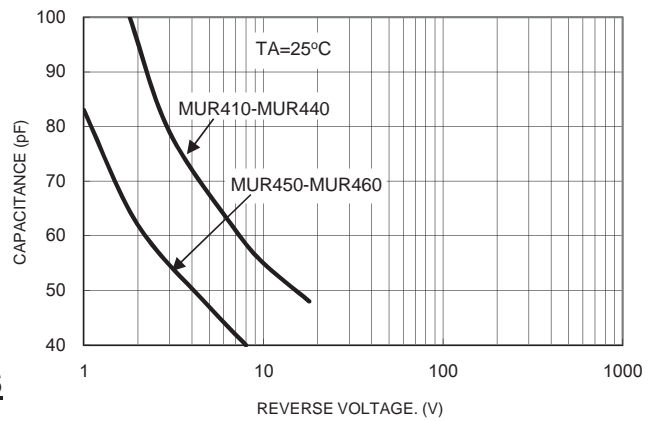
**FIG. 2- TYPICAL REVERSE CHARACTERISTICS**



**FIG. 3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT**



**FIG. 4- TYPICAL JUNCTION CAPACITANCE**



**FIG. 5-TYPICAL FORWARD CHARACTERISTICS**

