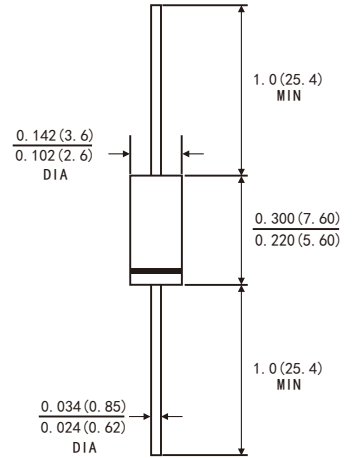


### FEATURES

- Glass passivated
- Ideal for surface mount automotive applications
- Ultrafast recovery time for high efficiency
- Built-in strain relief
- Easy pick and place
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Lead (Pb)-free component
- Component in accordance to RoHS 2011/65/EU
- High temperature soldering guaranteed: 260°C/10 seconds at terminals



### DO-15



### MECHANICAL DATA

- Case: JEDEC DO-15 molded plastic body
- Terminals: solder plated, solderable per MIL-STD-750, method 2026
- Polarity: color band denotes cathode end
- Mounting Position: Any

Dimensions in inches and (millimeters)

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Rating at 25°C ambient temperature unless otherwise specified, Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.)

	Symbols	MUR120	MUR140	MUR160	Units
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	200	400	600	Volts
Maximum RMS voltage	V <sub>RMS</sub>	140	280	420	Volts
Maximum DC blocking voltage	V <sub>DC</sub>	200	400	600	Volts
Maximum average forward rectified current (see Fig.1)	I(AV)	1.0			Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	30			Amps
Maximum instantaneous forward voltage at 1.0 A (Note 1)	V <sub>F</sub>	0.875	1.25		Volts
Maximum instantaneous reverse current at rated DC blocking voltage (Note 1)	T <sub>a</sub> = 25°C	5			μA
	T <sub>a</sub> = 125°C	50			
Maximum Reverse Recovery Time (Note 2)	t <sub>rr</sub>	25	50		ns
Typical thermal resistance (Note 3)	R <sub>θJA</sub>	35			°C/W
Operating junction temperature range	T <sub>J</sub>	-55 to +150			°C
Storage temperature range	T <sub>STG</sub>	-55 to +150			°C

- Notes:**
1. Pulse test: 300 μs pulse width, 1% duty cycle
  2. Reverse recovery test conditions I<sub>F</sub> = 0.5A, I<sub>R</sub> = 1.0A, I<sub>rr</sub> = 0.5A
  3. Thermal resistance from junction to ambient

# RATINGS AND CHARACTERISTIC CURVES MUR120 THRU MUR160

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

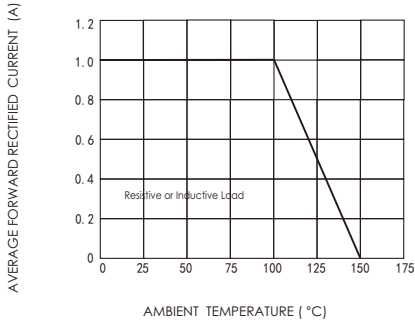


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

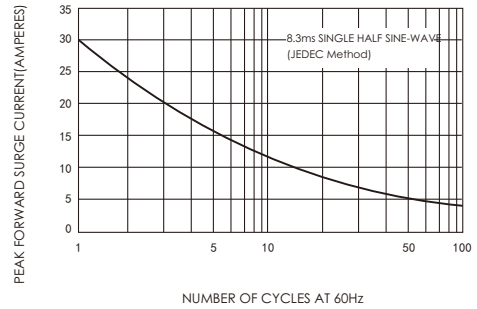


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

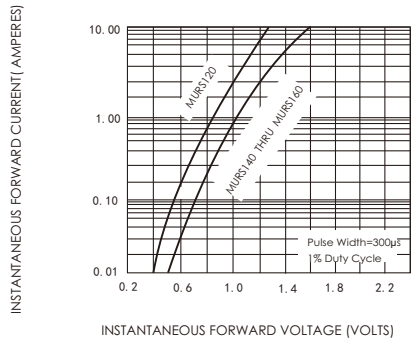


FIG.4-TYPICAL REVERSE CHARACTERISTICS

