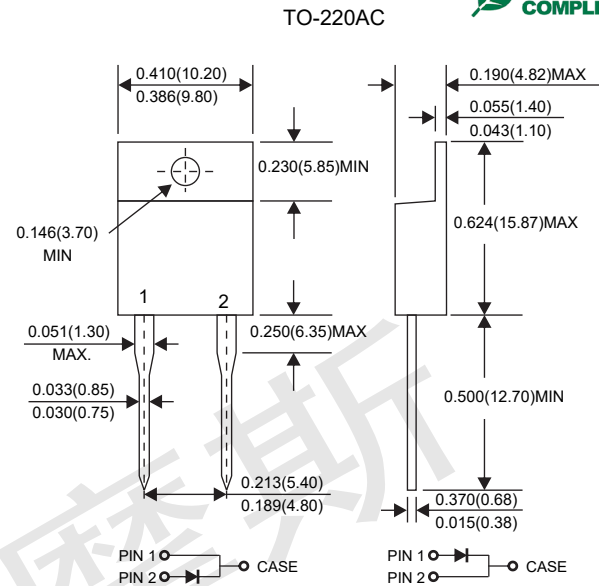


FEATURES

- For surface mounted applications
- Low profile package
- Built-in strain relief
- Easy pick and place
- Fast Recovery times for high efficiency
- Plastic package has Underwriters Laboratory
- Flammability Classification 94V-O
- High temperature soldering : 260°C /10 seconds at terminals

MECHANICAL DATA

- Case: Molded plastic, TO-220AC
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Marking: Type Number



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

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

Type Number or marks	Symbols	MUR820	MUR840	MUR860	MUR880	Units
Maximum Recurrent Peak Reverse Voltage	VRRM	200	400	600	800	Volts
Maximum RMS Voltage	VRMS	140	280	420	560	Volts
Maximum DC Blocking Voltage	VDC	200	400	600	800	Volts
Maximum Average Forward Rectified Current. Lead Length @Ta(Fig 1)	I(AV)	8.0				Amp
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	IFSM	100				Amp
Maximum Forward Voltage @8.0A	VF	1.0	1.3	1.7	1.85	Volts
Maximum DC reverse current at rated DC blocking voltage per T _J =25°C T _J =100°C	IR	10.0 500				uAmp
Typical Thermal Resistance T _J =25°C	R _θ JC	2.0				°C/W
Maximum Reverse Recovery Time (Note 1)	TRR	35			50	nS
Typical Junction Capacitance (Note 2)	CJ	150				pF
Operating Temperature Range T _J	T _J	-55 to +150				°C
Storage Temperature Range T _{STG}	T _{STG}	-55 to +150				°C

Note:

The above typical data meet the following standards

1. Measured with I_F =0.5A, I_R =1A, IRR =0.25A.
2. Measured at 1.0 MHz and applied reverse voltage of 4.0 V DC.
3. The typical data above is for reference only.

RATINGS AND CHARACTERISTIC CURVES

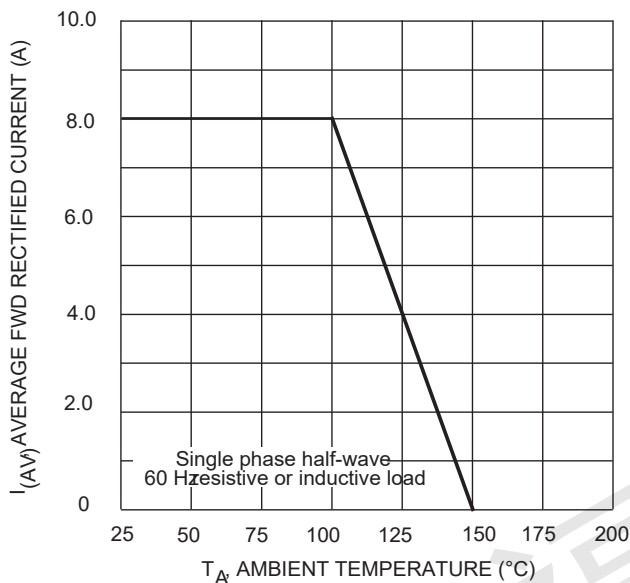


Fig. 1 Forward Derating Curve

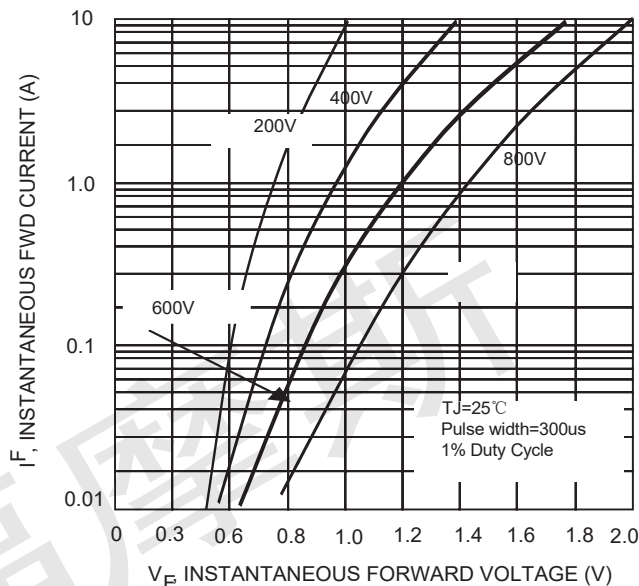


Fig. 2 Typical Forward Characteristics

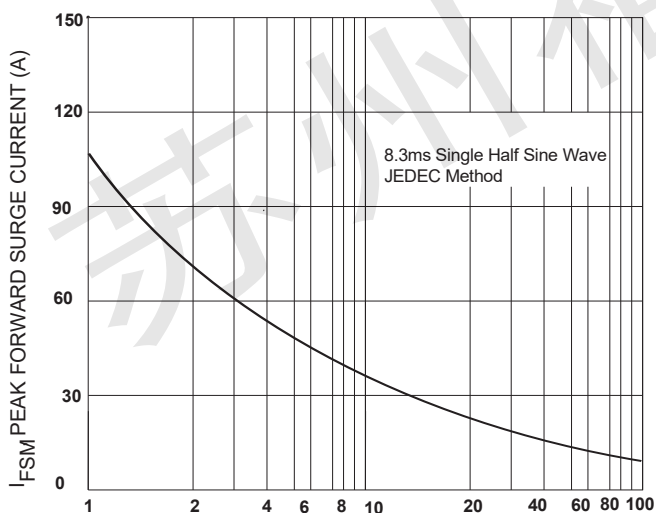


Fig. 3 Peak Forward Surge Current

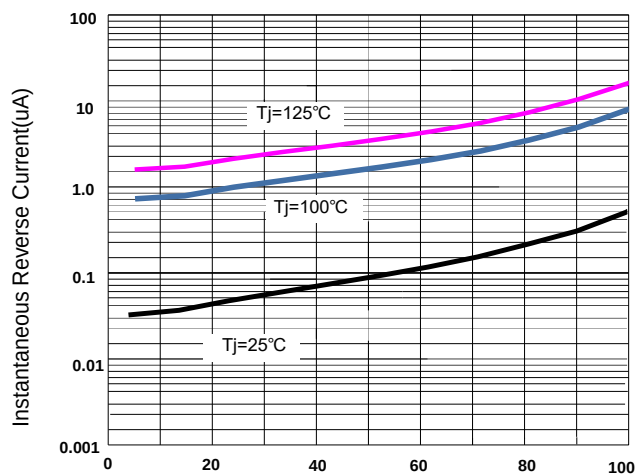
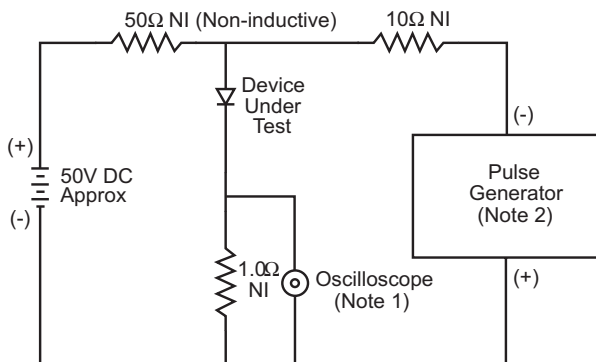


FIG4: Typical Reverse Characteristics



- Notes:
1. Rise Time=7ns max. Input Impedance=1MΩ 22pf
 2. Rise Time=10ns max. Source Impedance=50Ω

Fig. 5 Reverse Recovery Time Characteristic and Test Circuit