



VOLTAGE RANGE: 50 --- 600V

CURRENT: 8.0A

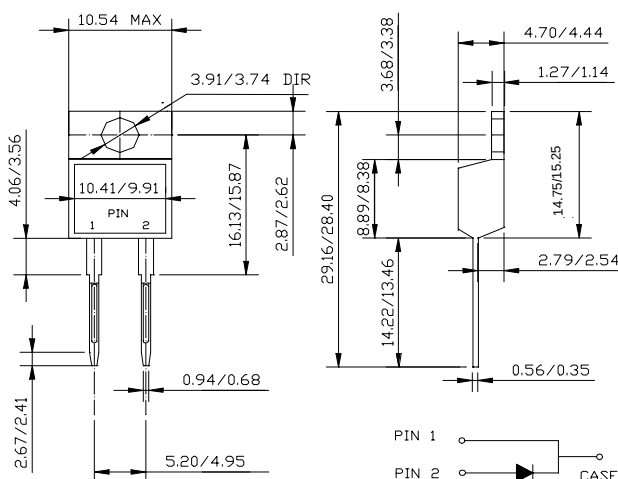
TO - 220AC

Features

- ◇ Low cost
- ◇ Diffused junction
- ◇ Glass passivated junction
- ◇ Low forward voltage drop
- ◇ High current capability
- ◇ Easily cleaned with Alcohol, Isopropanol and similar solvents
- ◇ The plastic material carries U/L recognition 94V-0

Mechanical Data

- ◇ Case: JEDEC TO-220AC
- ◇ Terminals: solderable per
MIL-STD-202, Method 208
- ◇ Polarity: Color band denotes cathode
- ◇ Weight: 0.064 ounces, 1.81 gram
- ◇ Mounting position: Any



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate by 20%.

PARAMETER		MUR 805G	MUR 810G	MUR 815G	MUR 820G	MUR 830G	MUR 840G	MUR 860G	UNIT
Device marking code		MUR805G	MUR810G	MUR815G	MUR820G	MUR830G	MUR840G	MUR860G	
Maximum recurrent peak reverse voltage	V_{RRM}	50	100	150	200	300	400	600	V
Maximum RMS voltage	V_{RMS}	35	70	105	140	210	280	420	V
Maximum DC blocking voltage	V_{DC}	50	100	150	200	300	400	600	V
Maximum average forward rectified current total device (rated V_R), $T_C=150^{\circ}C$	$I_{(AV)}$	8.0							A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load	I_{FSM}	100							A
Maximum instantaneous forward voltage (Note1) @ $I_F=8.0A, T_C=25^{\circ}C$ $I_F=8.0A, T_C=150^{\circ}C$	V_F	0.975 0.895				1.30 1.00		1.50 1.20	V
Maximum reverse current at rated DC blocking voltage @ $T_J=25^{\circ}C$ $T_J=150^{\circ}C$	I_R	5.0 250				10 500			μA
Maximum reverse recovery time (Note2) (Note3)	t_{rr}	25 35				50 60			ns
Typical thermal resistance junction to case	$R_{\theta JC}$	3.0				2.0			$^{\circ}C/W$
Operating junction temperature range	T_J	- 65 ---- + 175							$^{\circ}C$
Storage temperature range	T_{STG}	- 65 ---- + 175							$^{\circ}C$

NOTE:1.Pulse test:pulse width=300 μ s,duty cycle $\leq$ 2.0%

2. Measured with $I_F=0.5A$, $I_P=1A$, $I_{rr}=0.25 A$.

3. Measured with $I_F=1.0A, di/dt=50A/\mu s$.

Ratings AND Characteristic Curves

FIG.1 –TYPICAL FORWARD CHARACTERISTIC

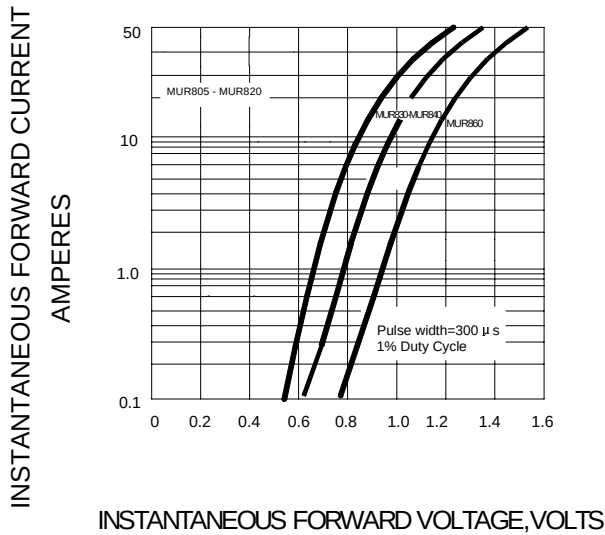


FIG.2 –TYPICAL REVERSE CHARACTERISTICS

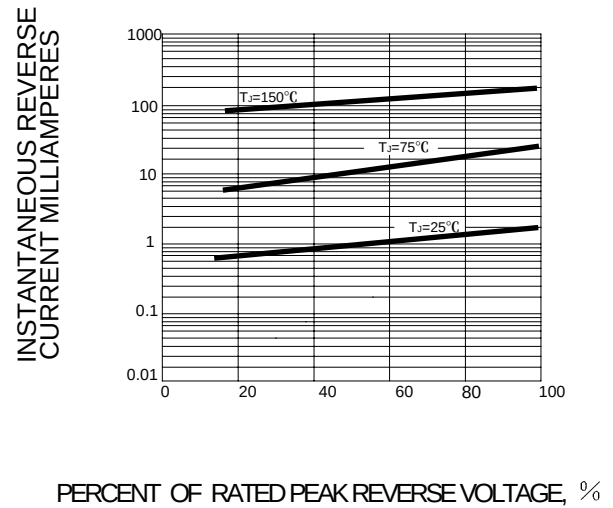


FIG.3 – PEAK FORWARD SURGE CURRENT

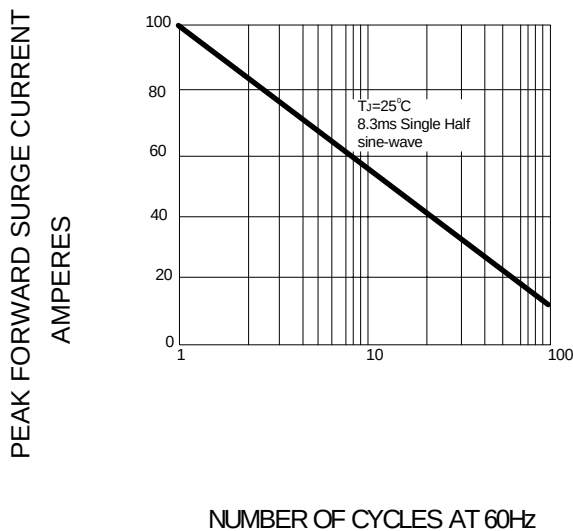
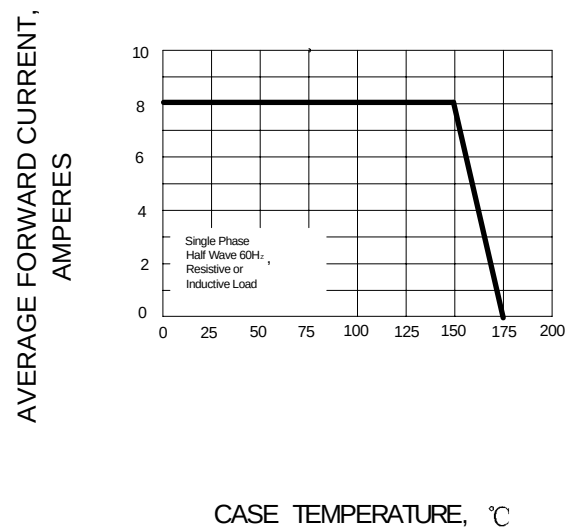


FIG.4 – FORWARD DERATING CURVE



Package	Packing	Box Size L×W×H(mm)	Quantity(pcs/box)	Carton Size L×W×H(mm)	Quantity(pcs/carton)
TO-220	50pcs/Tube	558×148×38	1000	565×225×175	5000