MUR805 - - - MUR860

SUPER FAST RECTIFIERS

VOLTAGE RANGE: 50--- 600 V **CURRENT:8.0 A**

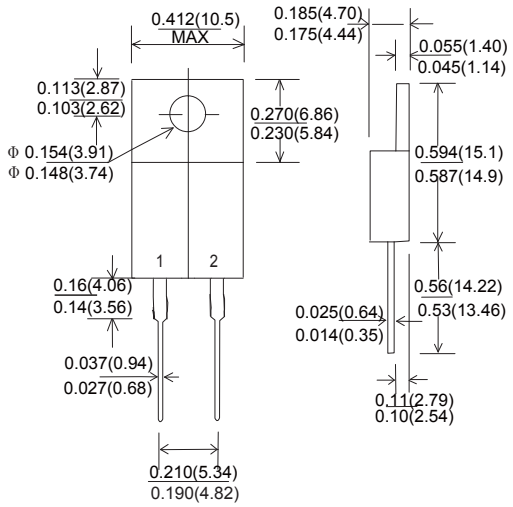
FEATURES

- Low forward voltage drop
- High current capability
- High reliability
- Low Power Loss，High Efficiency
- Ultrafast 35 and 60 Nanosecond Recovery times

MECHANICAL DATA

- Case: TO-220AC 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

TO-220AC



Dimensions in inches and (millimeters)

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%.

		MUR 805	MUR 810	MUR 815	MUR 820	MUR 830	MUR 840	MUR 860	UNITS
Device marking code		U805	U810	U815	U820	U830	U840	U860	
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℃	$I_{(AV)}$	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℃ / I_F=8.0A,T_C=150℃	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℃ / T_j=150℃	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			℃/W
Operating junction temperature range	T_j	- 65 ---- + 175							℃
Storage temperature range	T_{STG}	- 65 ---- + 175							℃

NOTE:1.Pulse test:pulse width=300μs,duty cycle≤2.0%
2. Measured with I_F=0.5A, I_R=1A, I_{rr}=0.25 A.
3. Measured with I_F=1.0A,di/dt=50A/μs.

RATINGS AND CHARACTERISTIC CURVES

FIG.1 –TYPICAL FORWARD CHARACTERISTIC

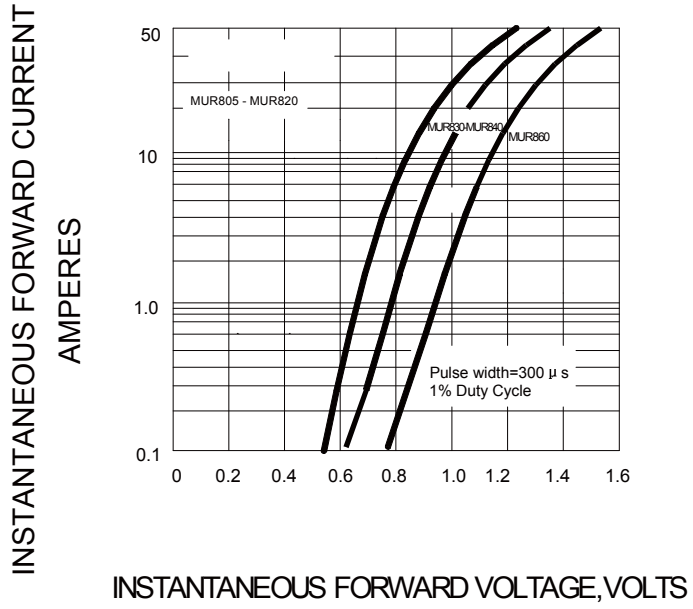


FIG.2 – TYPICAL REVERSE CHARACTERISTICS

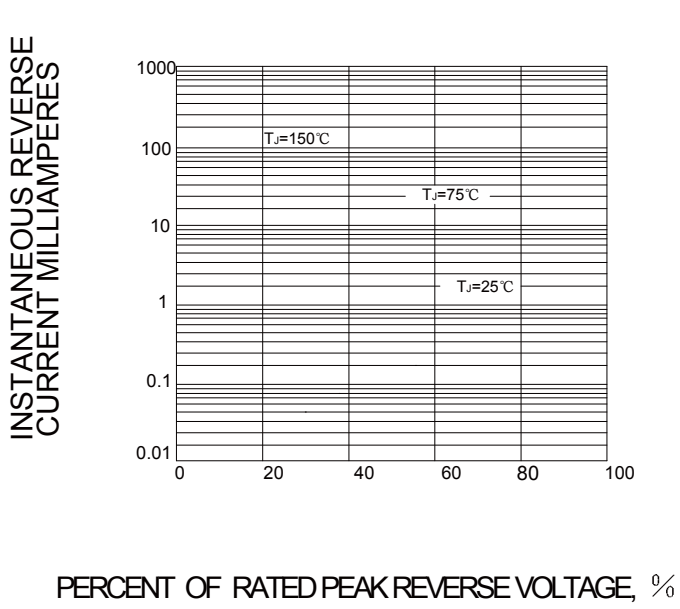


FIG.3 -- PEAK FORWARD SURGE CURRENT

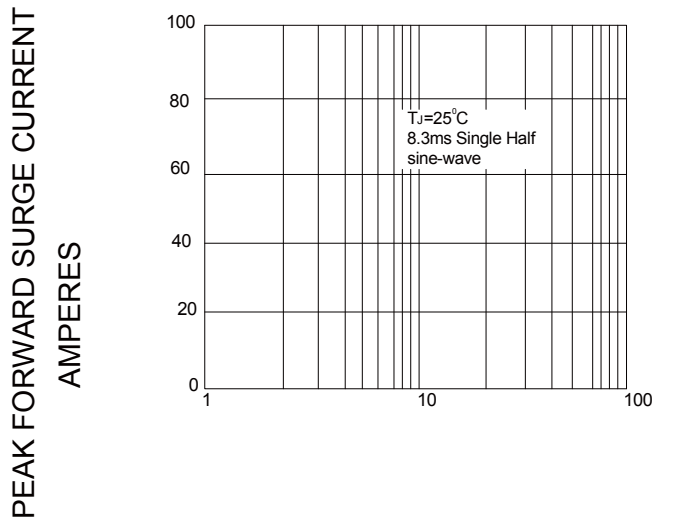
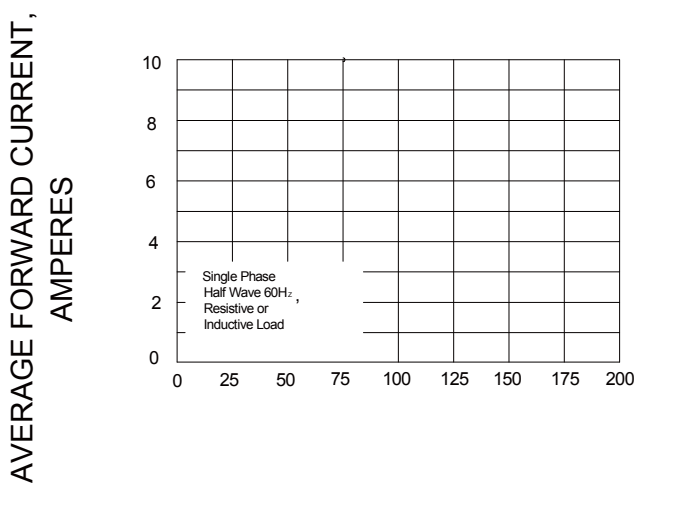



FIG.4 -- FORWARD DERATING CURVE