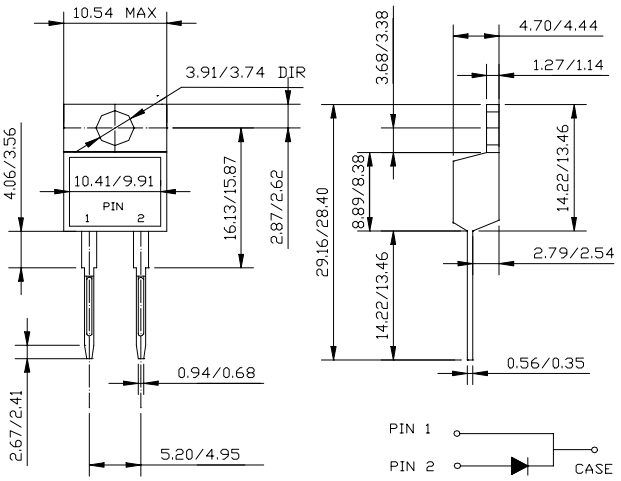
MUR805 - - - MUR860

ULTRA FAST RECTIFIERS

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%.

		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°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°C I_F=8.0A,T_C=150°C	V_F	0.975 0.895				1.30 1.00		1.50 1.20	V
Maximum reverse current @T_j=25°C at rated DC blocking voltage T_j=150°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			°C/W
Operating junction temperature range	T_j	- 65 ---- + 175							°C
Storage temperature range	T_{STG}	- 65 ---- + 175							°C

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

MUR805---MUR860

FIG.1 –TYPICAL FORWARD CHARACTERISTIC

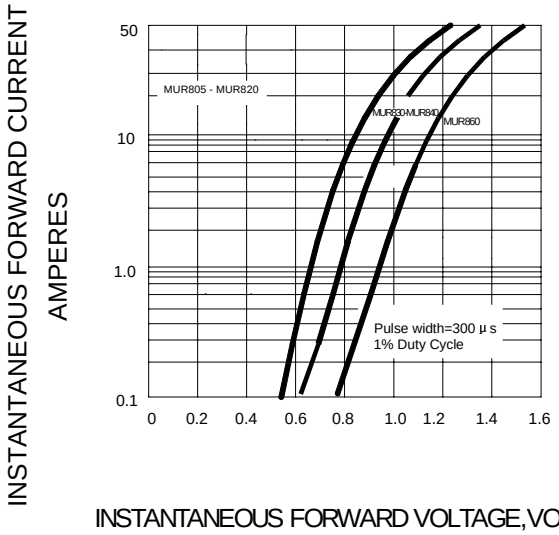


FIG.2 – TYPICAL REVERSE CHARACTERISTICS

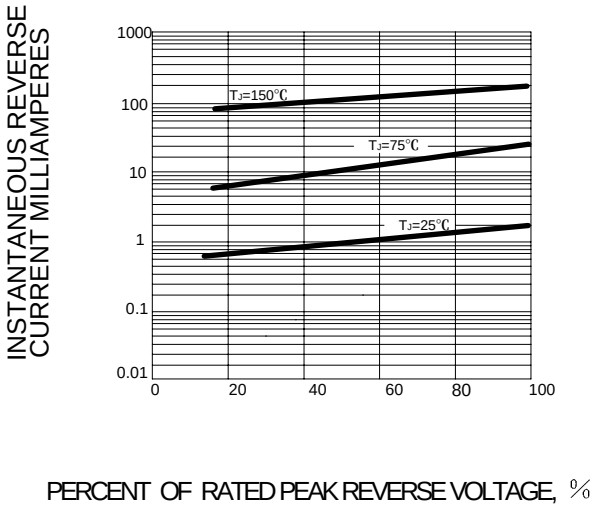


FIG.3 -- PEAK FORWARD SURGE CURRENT

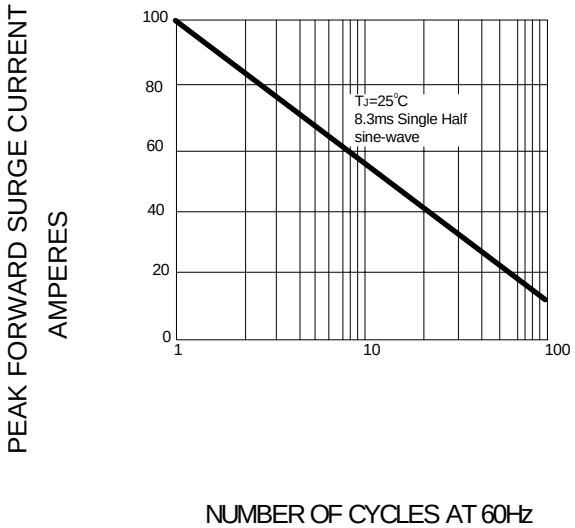


FIG.4 -- FORWARD DERATING CURVE