USF805-USF860

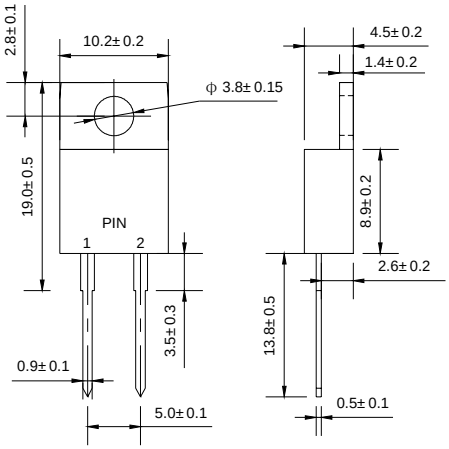
Super Fast Rectifiers

VOLTAGE RANGE: 50 --- 600V

CURRENT: 8.0A



TO-220AC



Dimensions in millimeters

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
- Polarity: Color band denotes cathode
- Weight: 0.064 ounces,1.96 gram
- Mounting position: Any

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

		USF 805	USF 810	USF 820	USF 830	USF 840	USF 850	USF 860	UNITS
Maximum recurrent peak reverse voltage	V_{RRM}	50	100	200	300	400	500	600	V
Maximum RMS voltage	V_{RMS}	35	70	140	210	280	350	420	V
Maximum DC blocking voltage	V_{DC}	50	100	200	300	400	500	600	V
Maximum average forward rectified current total device (rated V_R),T_C=100℃	$I_{(AV)}$	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	V_F	0.98			1.3		1.7		V
Maximum reverse current @T_j=25℃ at rated DC blocking voltage @T_j=125℃	I_R	30 800							μA
Maximum reverse recovery time (Note2)	t_{rr}	25							ns
Typical thermal resistance junction to case	$R_{\theta jC}$	5.0							℃/W
Operating junction temperature range	T_j	- 55 ---- + 150							℃
Storage temperature range	T_{STG}	- 55 ---- + 150							℃

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.

http://www.luguang.cn **mail:lge@luguang.cn**

USF805-USF860

Super Fast Rectifiers

Ratings AND Charactieristic Curves

FIG.1 –TYPICAL FORWARD CHARACTERISTIC

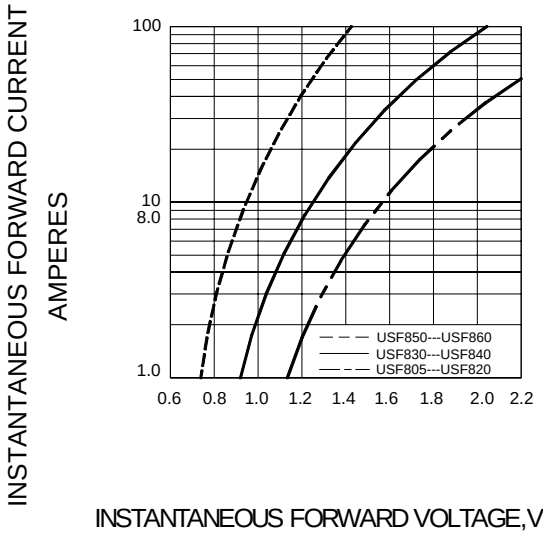


FIG.2 – TYPICAL REVERSE CHARACTERISTICS

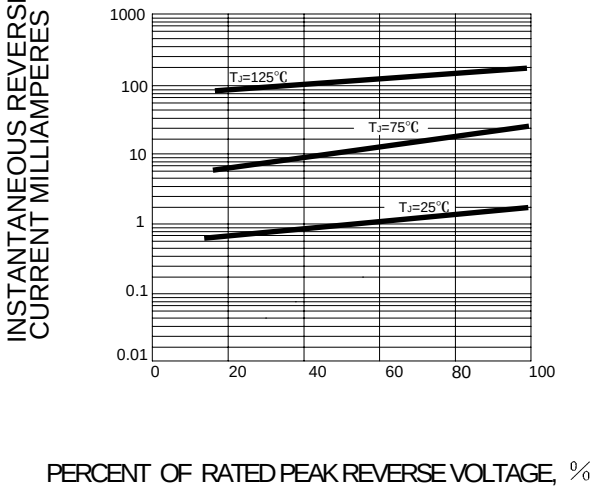


FIG.3 – PEAK FORWARD SURGE CURRENT

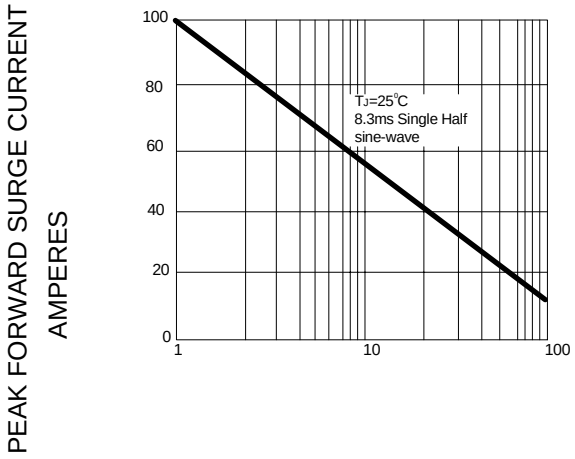


FIG.4 – FORWARD DERATING CURVE

