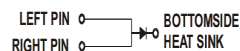


SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

Features

TO-277

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ For surface mounted applications
- ◆ Built-in strain relief, ideal for automated placement
- ◆ Low forward voltage drop
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed 250°C/10 seconds at terminals



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 current derate by 20%.

Parameter	SYMBOL	ST860	UNIT
Marking Code		ST860	
Maximum repetitive peak reverse voltage	V_{RRM}	60	V
Maximum DC blocking voltage	V_{DC}		
Maximum RMS voltage	V_{RMS}	42	V
Average Rectified Output Current	$I_{(O)}$	8	A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	150	A

Electrical Characteristics $T_a=25^{\circ}\text{C}$ unless otherwise noted

Parameter	Test Conditions	Symbol	Value		Unit
			Typ	Max	
Forward Voltage Drop	at 2.0A at 8.0A	V_F	—	0.40	V
			—	0.55	
Peak reverse current at rated DC blocking voltage	$T_A=25^{\circ}\text{C}$ $T_A=125^{\circ}\text{C}$	I_R	—	0.5	mA
			—	50	mA
Operating junction storage temperature range		T_J	-55 to +150		$^{\circ}\text{C}$
Storage temperature range		T_{STG}	-55 to +150		$^{\circ}\text{C}$
Typical thermal resistance		$R_{\theta JA}$	60.0		$^{\circ}\text{C}/\text{W}$

Note: 1. The typical data above is for reference only.

Ratings And Characteristic Curves

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

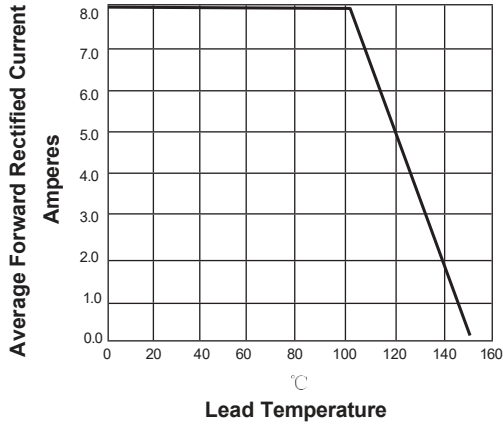


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

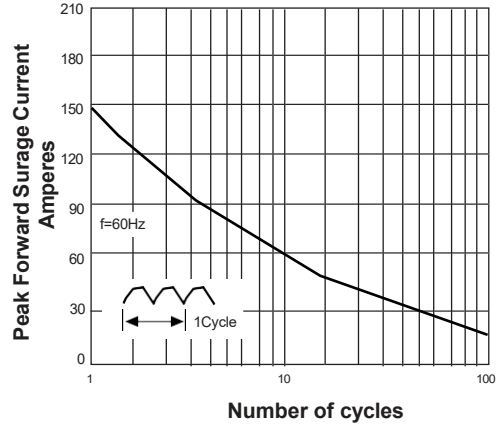


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

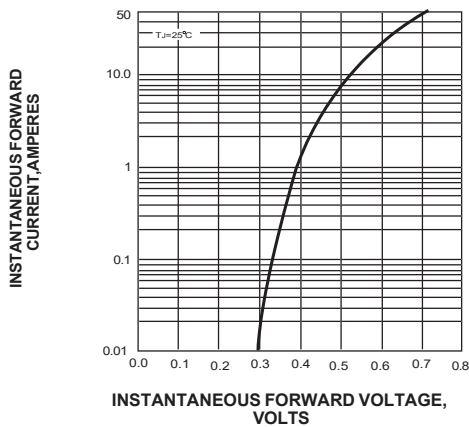
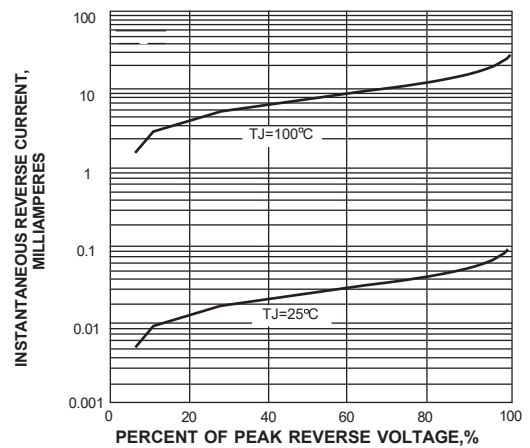


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS



The curve above is for reference only.