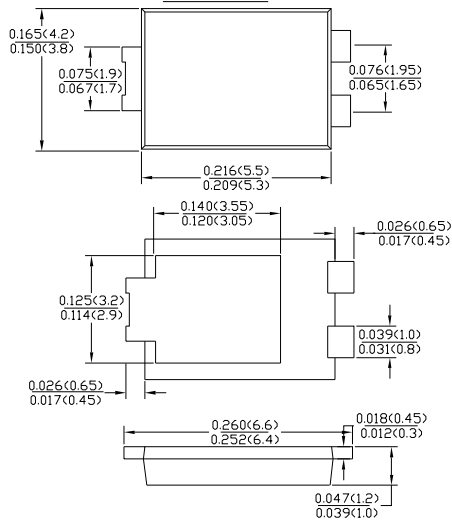




SL1045U

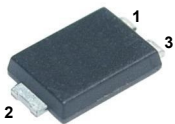
10.0A SCHOTTKY BARRIER RECTIFIER

T0-277

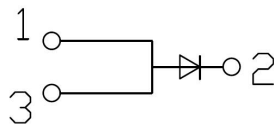


Dimensions inches and (millimeters)

EPinning



Equivalent Circuit



Features

- Schottky Barrier Chip
- High Thermal Reliability
- Patented Super Barrier Rectifier Technology
- High Forward Surge Capability
- Ultra Low Forward Voltage Drop $V_F(\text{typ})=0.2\text{V}$
- Excellent High Temperature Stability

Mechanical Data

- Case: T0-277 Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.093 grams (approx.)
- Mounting Position: Any
- Marking: Type Number
- Lead Free: For RoHS/Lead Free Version

Applications

For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications.

Absolute Maximum Ratings and Electrical Characteristics @ $T_A=25^\circ\text{C}$ unless otherwise specified

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

Characteristic	Symbol	SL1045U	Unit	
Peak Repetitive Reverse Voltage	V_{RRM}	45	V	
Working Peak Reverse Voltage	V_{RWM}			
Peak Reverse Voltage	V_{RM}			
RMS Reverse Voltage	$V_{R(RMS)}$	31.5	V	
Average Rectified Output Current	I_O	10	A	
Non-Repetitive Peak Forward Surge	I_{FSM}	250	A	
Forward Voltage	V_F	Typ	Max	
		@ $I_F = 2\text{A}, T_j = 25^\circ\text{C}$	0.33	0.38
		@ $I_F = 2\text{A}, T_j = 125^\circ\text{C}$	0.20	
		@ $I_F = 10\text{A}, T_j = 25^\circ\text{C}$	0.42	0.46
		@ $I_F = 10\text{A}, T_j = 125^\circ\text{C}$	0.35	
Instantaneous Reverse Current	I_R (Note 2)	@ $V_R = 45\text{V}, T_j = 25^\circ\text{C}$	0.06	0.12
		@ $V_R = 45\text{V}, T_j = 100^\circ\text{C}$	0.20	12
		@ $V_R = 45\text{V}, T_j = 125^\circ\text{C}$	0.42	50
Typical Thermal Resistance Junction to Ambient (Note 1)	$R_{\theta JA}$	73	$^\circ\text{C/W}$	
Operating Temperature Range	T_j	-55 to +150	$^\circ\text{C}$	
Storage Temperature Range	T_{STG}	-55 to +150	$^\circ\text{C}$	

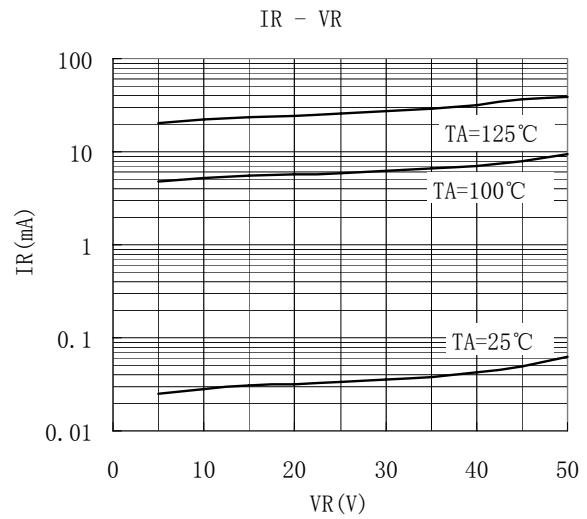
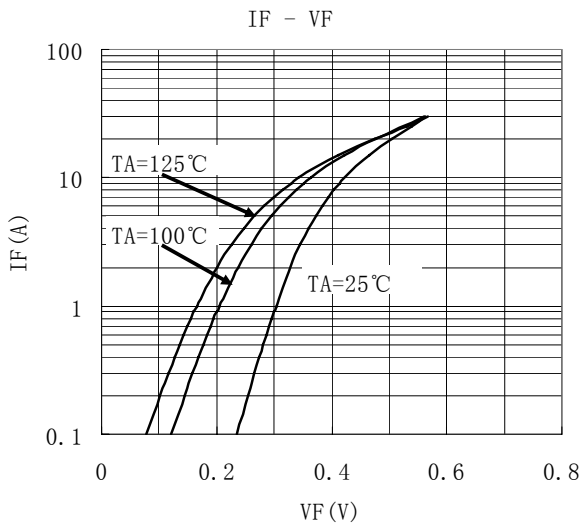
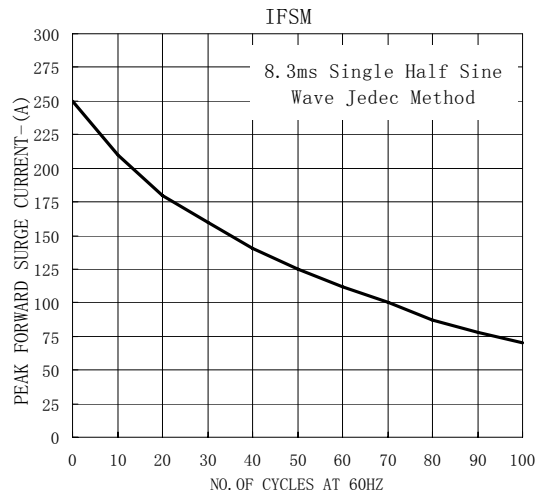
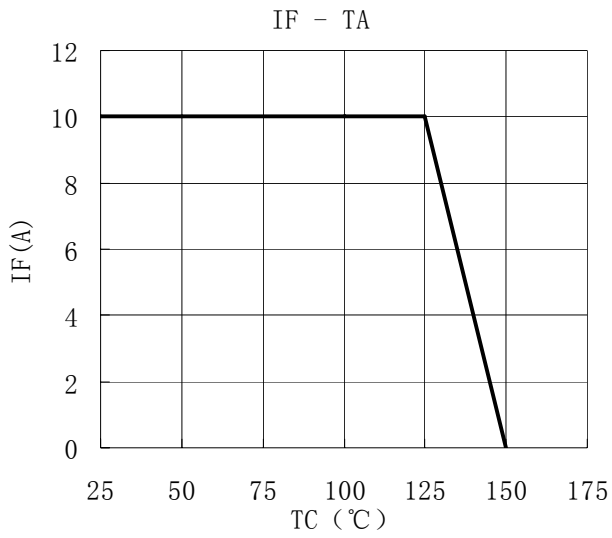
Note: 1. FR-4 PCB, 2oz. Copper, minimum recommended pad layout per.
2. Short duration pulse test used to minimize self-heating effect.



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10A SCHOTTKYBARRIER RECTIFIER SL1045U

Electrical Characteristic Curve



The cruve graph is for reference only, can't be the basis for judgment(曲线图仅供参考)!



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