



25A Surface Mount Schottky Barrier Rectifier

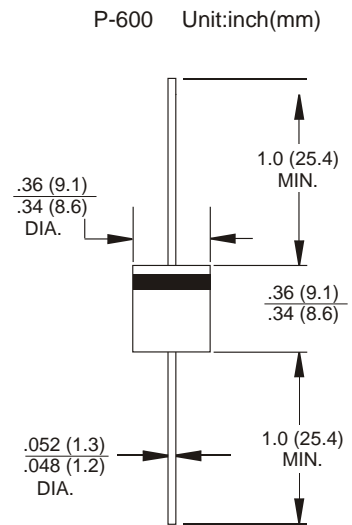


Features

- Schottky Barrier Chip
- High Thermal Reliability
- Patented Super Barrier Rectifier Technology
- High Forward Surge Capability
- Ultra Fow Power Loss,High Efficiency
- Excellent High Temperature Stability
- Plastic material-UL flammability 94V-0

Mechanical Data

- Case: P-600, molded plastic
- Terminals:Plated Leads Solderable per MIL-STD-202,Method 208
- Polarity:Cathode Band
- Mounting Position:Any
- Marking:Type Number
- Lead Free:For RoHS/Lead Free Version



Maximum Ratings and Electrical Characteristics @T_A =25 °C unless otherwise specified

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

Parameter	Symbol	25SQ045	Unit
Peak Repetitive Reverse Voltage	V _{RRM}	45	V
Working Peak Reverse Voltage	V _{RWM}		
DC blocking voltage	V _{DC}		
RMS Rectified Voltage	V _{R(RMS)}	31.5	V
Average Rectified Output Current	I _{F(AV)}	25	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave @T _j =25 °C	I _{FSM}	450	A
Superimposed On Rated Load (JEDEC Method)		360	
Non-Repetitive Peak Forward Surge Current 1.0ms Single half sine-wave @T _j =125°C	I _{FSM}	900	A
Superimposed On Rated Load (JEDEC Method)		720	
10000 times of the wave surge current (time width 1ms, time interval 3s)	I _{FSM}	337.5	A
I ² t Rating for Fusing (t < 8.3ms)	I ² t	840.4	A ² s
Forward Voltage Drop T _A =25 °C @I _F =25A	V _F	0.5	V
Peak Reverse Current At Rated DC Blocking Voltage	I _R	T _A =25°C 0.3	mA
		T _A =100°C 15	
Typical Junction Capacitance (Note 1)	C _J	1500	pF
Typical Thermal Resistance (Note 2)	R _{θJA}	38	°C/W
	R _{θJL}	4	
	R _{θJC}	3.5	
Operating and Storage Temperature Range	T _J , T _{STG}	-55 to +150	°C

Note: 1. Measured at 1.0 MHz and Applied reverse Voltage of 4.0V D.C

2.Fr-4pcb.2oz.Copper,minimum recommend pad layout .18.8mm×14.4.Anode pad dimensions 5.6mm×14.4mm.

DEVICE CHARACTERISTICS

25SQ045

FIG 1-FORWARD CURRENT DERATING CURVE

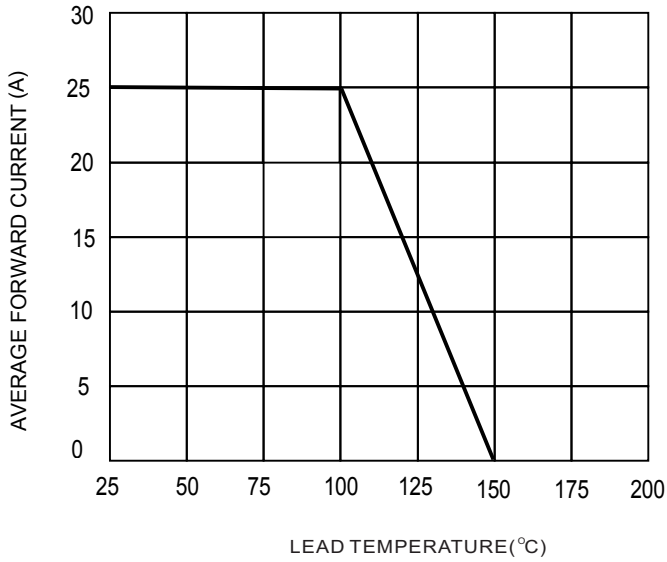


FIG.2-TYPICAL FORWARD CHARACTERISTICS

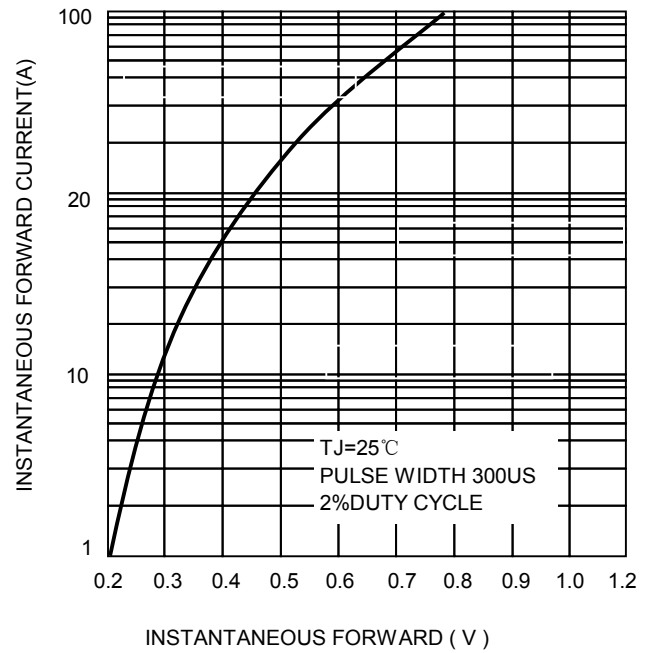


FIG.3-MAXIMUM NON-REPETITIVE SURGE

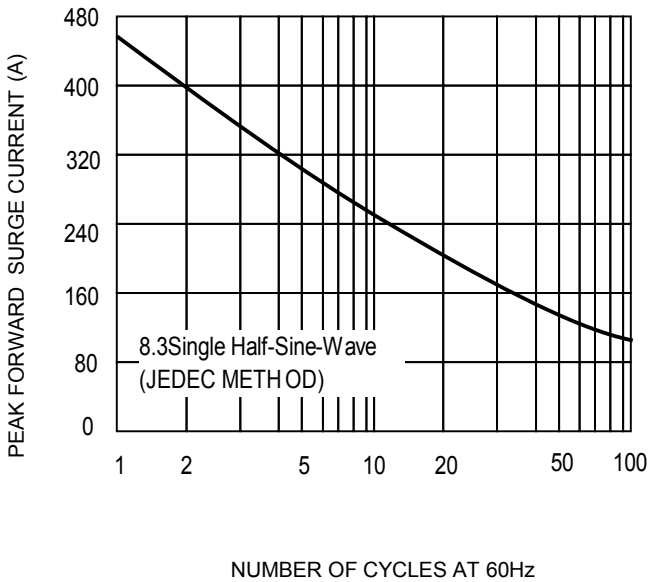


FIG 4-TYPICAL REVERSE CHARACTERISTICS

