

SL1045 THRU SL1080 10.0A Surface Mount Schottky Barrier Rectifiers

Features

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

Mechanical Data

- · Case: TO-277B, 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



dimensions in inches and (millimeters)

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	SL1045	SL1050	SL1060	SL1080	Unit
Peak Repetitive Reverse Voltage	V _{RRM}					
Working Peak Reverse Voltage	V_{RWM}	45	50	60	80	V
DC blocking voltage	VDC					
RMS Rectified Voltage	V _{R(RMS)}	32	35	42	56	V
Average Rectified Output Current (Note1)	IF(AV)	10				А
Non-Repetitive Peak Forward Surge8.3ms						
Single Half Sine-Wave Superimposed on rated	IFSM	250				А
load(JEDEC Method) (Note2)						
I ² t Rating for Fusing (t < 8.3ms)	l²t	259.375				A ² s
Forward Voltage Drop T _A =25°C @ IF=10A	Vfm	0.45	0.47	0.50	0.75	V
Peak Reverse CurentTA =25°CAt Rated DC Blocking VoltageTA =100°C	lr	0.3 15				mA
Typical Thermal Resistance	Reja	80				°C/W
Junctionto Ambient	Rejl	15				
Operating junction temperature range	TJ	-55 to +150				°C
storage temperature range	Тѕтс	-55 to +150				°C

Note:1.Valid Provided that are kept at ambient temperature at a distance of 9.5mm from the case. 2.Fr-4pcb.2oz.Copper,minimum recommend pad layout .18.8mm×14.4.Anode pad dimensions 5.6mm×14.4mm.



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12 Average Forward Current, $I_{F(AV)}\left(A\right)$ Based on Lead Temp(T_) 8 4 0 └─ 25 50 75 100 125 150 175 LEAD TEMPERATURE , TL (°C)

Fig.1 - Forward Current Derating Curve

Fig3: Surge Forward Current Capadility



FIG.5 MOUNTING PAD LAYOUT





Fig4: Typical Reverse Characteristics



version:02



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