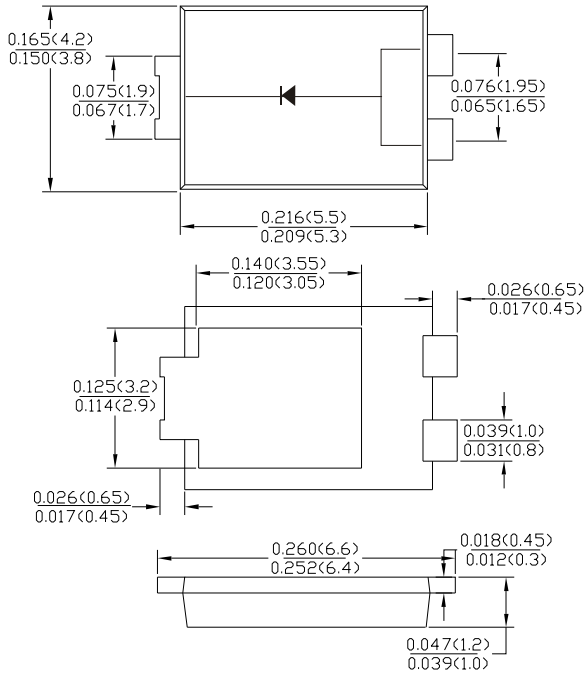




SL2045 THRU SL2080

20.0A Surface Mount Schottky Barrier Rectifiers

T0-277



Dimensions inches and (millimeters)

Features

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

Mechanical Data

- Case: TO-277, 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 @ $T_A = 25^\circ\text{C}$ unless otherwise specified

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

Parameter	Symbol	SL 2045	SL 2050	SL 2060	SL 2080	Unit
Peak Repetitive Reverse Voltage	V_{RRM}					
Working Peak Reverse Voltage	V_{RWM}	45	50	60	80	V
DC blocking voltage	V_{DC}					
RMS Rectified Voltage	$V_{R(RMS)}$	32	35	42	56	V
Average Rectified Output Current (Note1)	I_o	20				A
Non-Repetitive Peak Forward Surge 8.3ms						
Single Half Sine-Wave Superimposed on rated load (JEDEC Method) (Note2)	I_{FSM}	275				A
Forward Voltage Drop $T_A = 25^\circ\text{C}$ @ $I_F = 20\text{A}$	V_{FM}	0.50	0.52	0.55	0.75	V
Peak Reverse Current $T_A = 25^\circ\text{C}$ At Rated DC Blocking Voltage $T_A = 100^\circ\text{C}$	I_r	0.3 15				mA
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}$ $R_{\theta JL}$	80 15				$^\circ\text{C/W}$
Operating junction temperature range	T_J	-55 to +150				$^\circ\text{C}$
storage temperature range	T_{STG}	-55 to +150				$^\circ\text{C}$

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.



RATINGS AND CHARACTERISTIC CURVES SL2045 THRU SL2080

Fig.1 - Forward Current Derating Curve

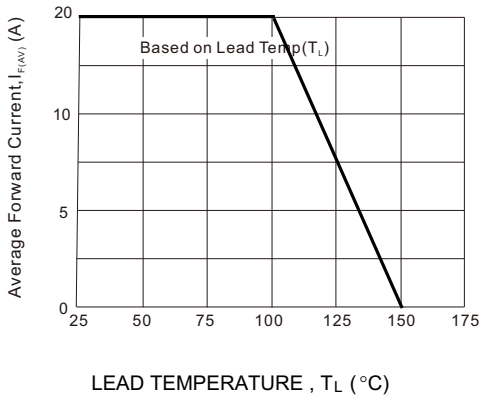


Fig2 : Instantaneous Forward Voltage

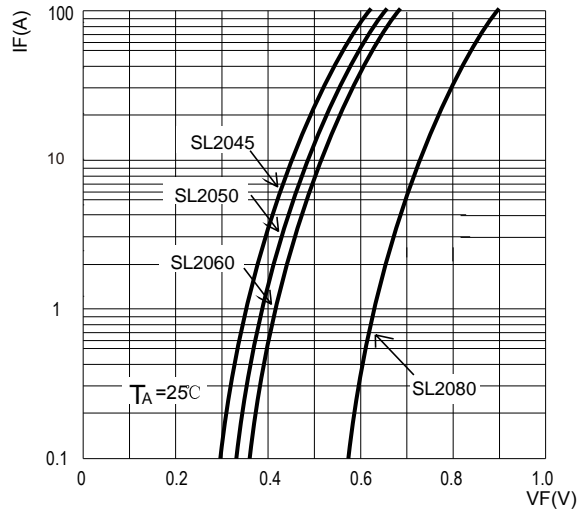


Fig3: Surge Forward Current Capability

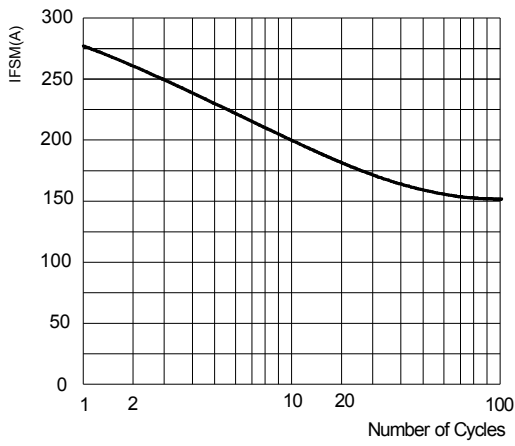
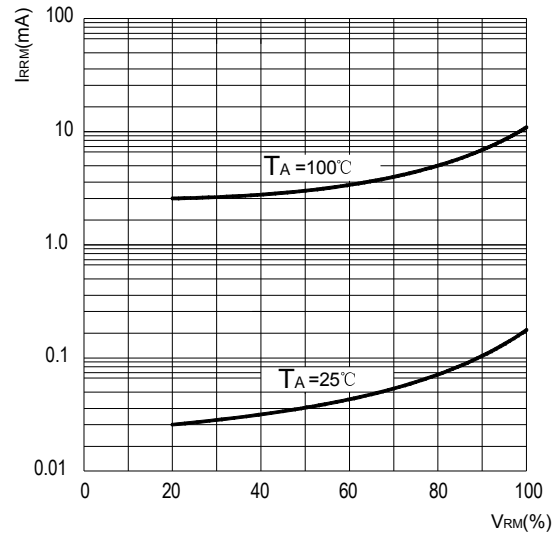


Fig4: Typical Reverse Characteristics



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

