SL1045 THRU SL10200

Reverse Voltage - 45 to 200 Volts Forward Current -10.0 Ampere

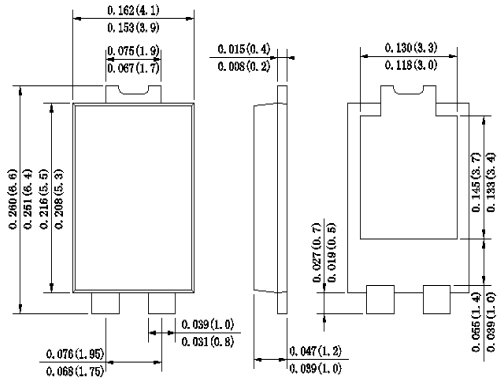
SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

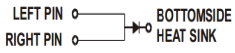
Features

TO-277

RoHS COMPLIANT

- ◆ 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





Dimensions in inches and (millimeters)

Mechanical Data

Case : JEDEC TO-277 Molded plastic body
Terminals :Plated Leads Solderable per MIL-STD-202,Method 208
Polarity : Polarity symbol marking on body
Mounting Position : Any
Weight : 0.003 ounce, 0.092 grams

Maximum Ratings And Electrical Characteristics

Ratings at 25℃ ambient temperature unless otherwise specified.
Single phase half-wave 60Hz,resistive or inductive load,for capacitive load current derate by 20%.

Parameter / Marking Code	SYMBOLS	SL 1045	SL 1050	SL 1060	SL 1080	SL 10100	SL 10150	SL 10200	UNIT
Maximum repetitive peak reverse voltage	V_{RRM}	45	50	60	80	100	150	200	V
Maximum working peak reverse voltage	V_{RWM}								
Maximum DC blocking voltage	V_{DC}								
RMS Reverse voltage	V_{RMS}	32	35	42	56	70	105	140	V
Average Rectified Output Current	$I_{(O)}$	10							A
Non-Repetitive Peak Forward Surge8.3ms Single Half Sine-Wave Superimposed on rated load(JEDEC Method)	I_{FSM}	250							A
Forward Voltage Drop at 10.0A T_A=25℃	V_F	0.45		0.50	0.75		0.78		V
Peak reverse curent T_A=25℃ at rated DC blocking voltage T_A=125℃	I_R	0.3 15							mA
Typical thermal resistance Junctionto Ambient	$R_{\theta JA}$ $R_{\theta JL}$	80 15							℃/W
Operating junction and storage temperature range	T_J,T_{STG}	-55 to +150							℃

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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Ratings And Characteristic Curves

Fig.1 - Forward Current Derating Curve

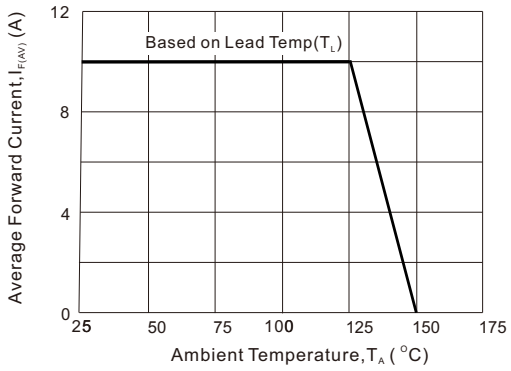


Fig2 : Instantaneous Forward Voltage

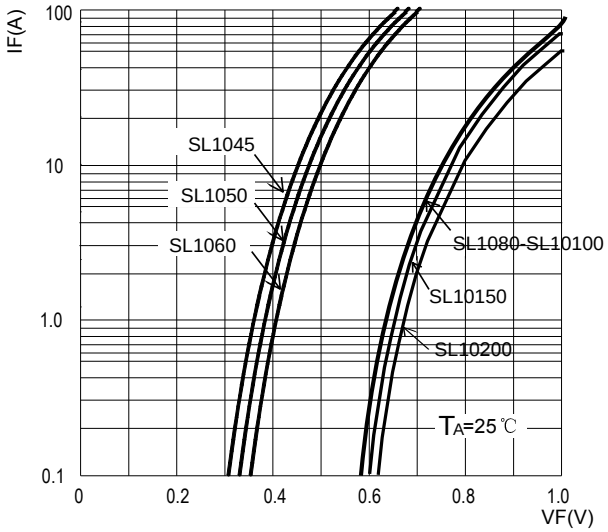


Fig3: Surge Forward Current Capadility

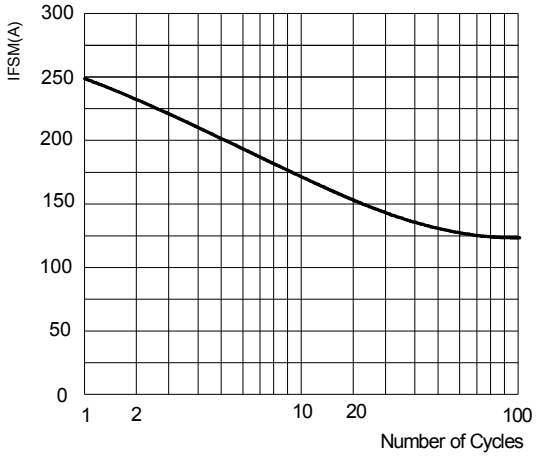
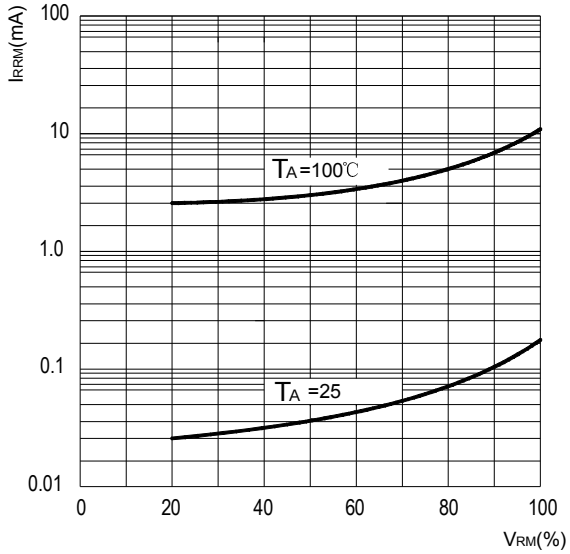


Fig4: Typical Reverse Characteristics



The curve above is for reference only.

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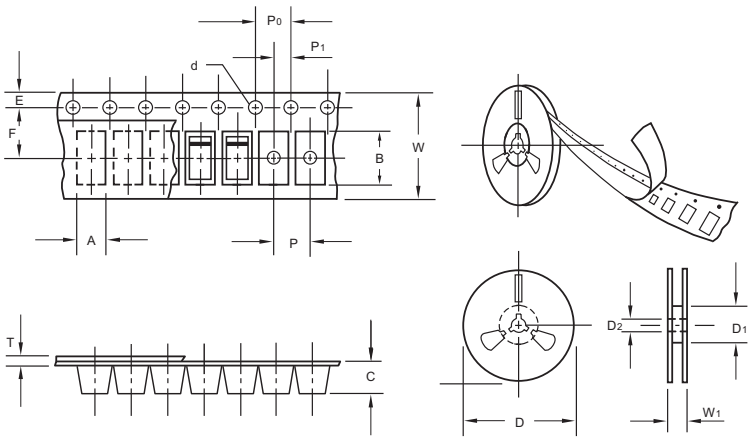
Packing information



unit:mm

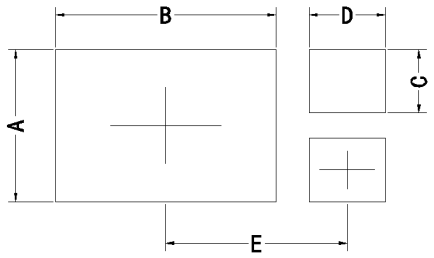
Item	Symbol	Tolerance	TO-277
Carrier width	A	0.1	4.45
Carrier length	B	0.1	7.0
Carrier depth	C	0.1	1.60
Sprocket hole	d	0.05	1.55
13" Reel outside diameter	D	2.0	330.00
13" Reel inner diameter	D_1	min	50.0
Feed hole diameter	D_2	0.5	13.00
Sprocket hole position	E	0.1	1.75
Punch hole position	F	0.1	7.50
Punch hole pitch	P	0.1	8.00
Sprocket hole pitch	P_0	0.1	4.00
Embossment center	P_1	0.1	2.00
Overall tape thickness	T	0.1	0.25
Tape width	W	0.3	12.00
Reel width	W_1	1.0	12.30

Note:Devices are packed in accor dance with EIA standar RS-481-A and specifications listed above.

Reel packing

PACKAGE	REEL SIZE	REEL (pcs)	COMPONENT SPACING (m/m)	BOX (pcs)	INNER BOX (m/m)	REEL DIA, (m/m)	CARTON SIZE (m/m)	CARTON (pcs)	APPROX. GROSS WEIGHT (kg)
TO-277	13"	5,000	4.0	10,000	210*208*203	330	430*430*235	80,000	13.0

Suggested Pad Layout



Symbol	Unit (mm)	Unit (inch)
A	3.60	0.142
B	5.35	0.211
C	1.50	0.059
D	1.85	0.073
E	4.30	0.169