SL0540 THRU SL05200

Reverse Voltage - 40 to 200 Volts Forward Current -5.0 Ampere

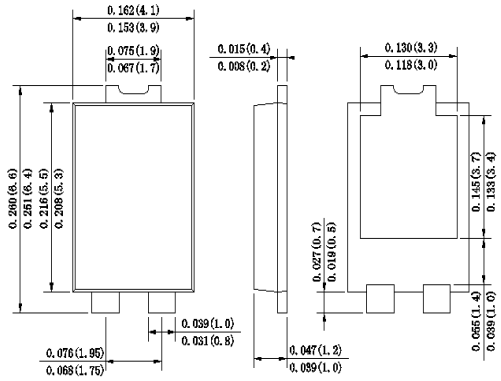
SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

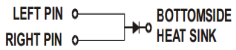
Features

- 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

TO-277

RoHS COMPLIANT





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	SYMBOLS	SL 0540	SL 0545	SL 0550	SL 0560	SL 0580	SL 05100	SL 05150	SL 05200	UNIT
Marking Code		MDD SL 0540	MDD SL 0545	MDD SL 0550	MDD SL 0560	MDD SL 0580	MDD SL 05100	MDD SL 05150	MDD SL 05200	
Maximum repetitive peak reverse voltage	V_{RRM}	40	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}	28	32	35	42	56	70	105	140	V
Average Rectified Output Current	$I_{(O)}$	5.0								
Non-Repetitive Peak Forward Surge8.3ms Single Half Sine-Wave Superimposed on rated load(JEDEC Method)	I_{FSM}	140								A
Forward Voltage Drop at 5.0A T_A=25℃	V_F	0.45		0.50		0.72		0.80	0.85	V
Peak reverse curent T_A=25℃	I_R	0.3								mA
at rated DC blocking voltage T_A=125℃		15								
Typical thermal resistance	$R_{\theta JA}$	80.0								℃/W
Operating junction and storage temperature range	T_J,T_{STG}	-55 to +150								℃

Note:1.The typical data above is for referenceonly.

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Ratings And Characteristic Curves

Fig.1 - Forward Current Derating Curve

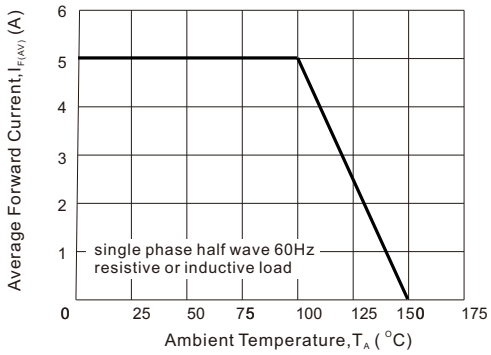


Fig2 : Instantaneous Forward Voltage

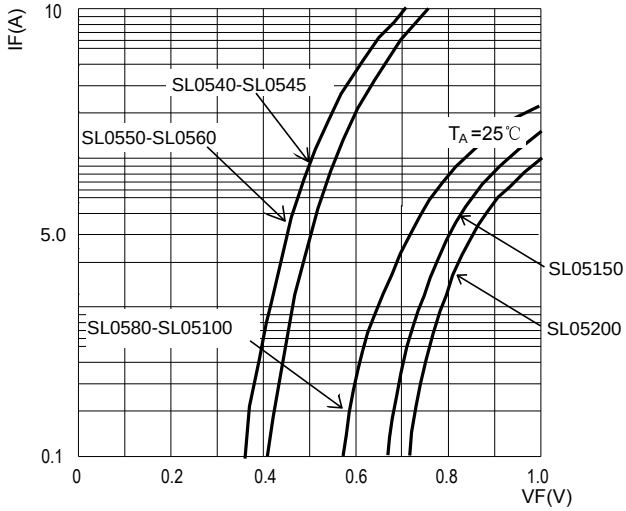


Fig3: Surge Forward Current Capadility

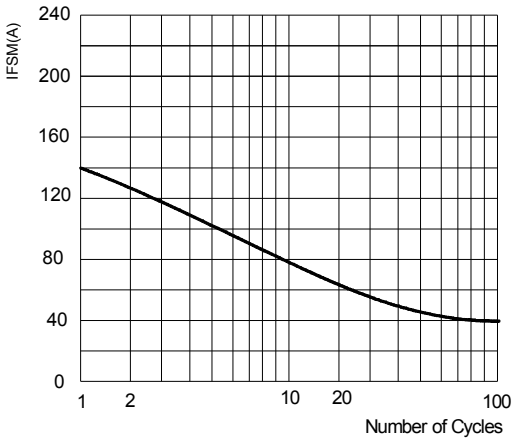
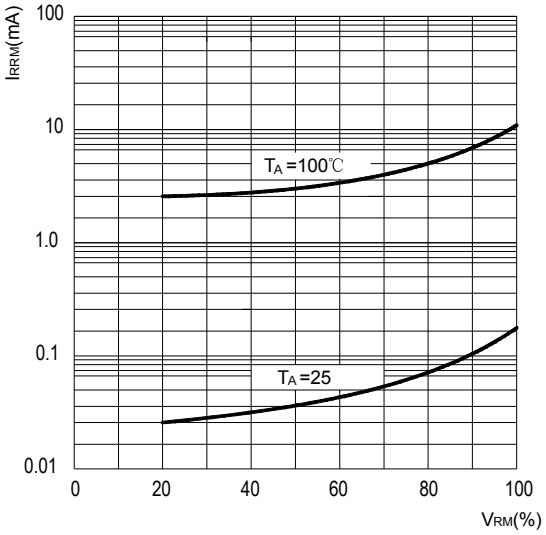


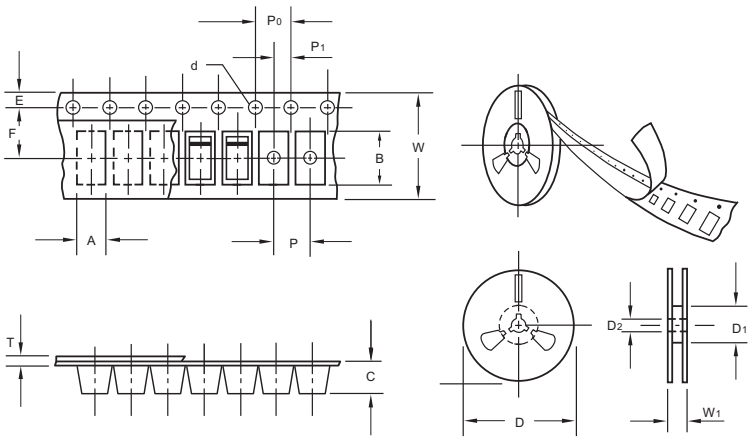
Fig4: Typical Reverse Characteristics



The curve above is for reference only.

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Packing information



unit:mm

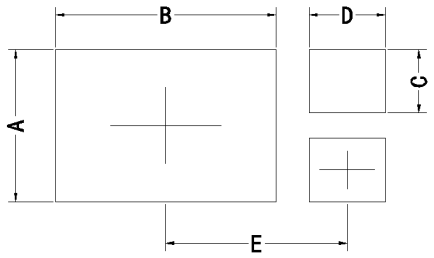
Item	Symbol	Tolerance	TO-277
Carrier width	A	0.1	4.45
Carrier length	B	0.1	7.0
Carrier depth	C	0.1	1.60
Sprocket hole	d	0.05	1.55
13" Reel outside diameter	D	2.0	330.00
13" Reel inner diameter	D_1	min	50.0
Feed hole diameter	D_2	0.5	13.00
Sprocket hole position	E	0.1	1.75
Punch hole position	F	0.1	7.50
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

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