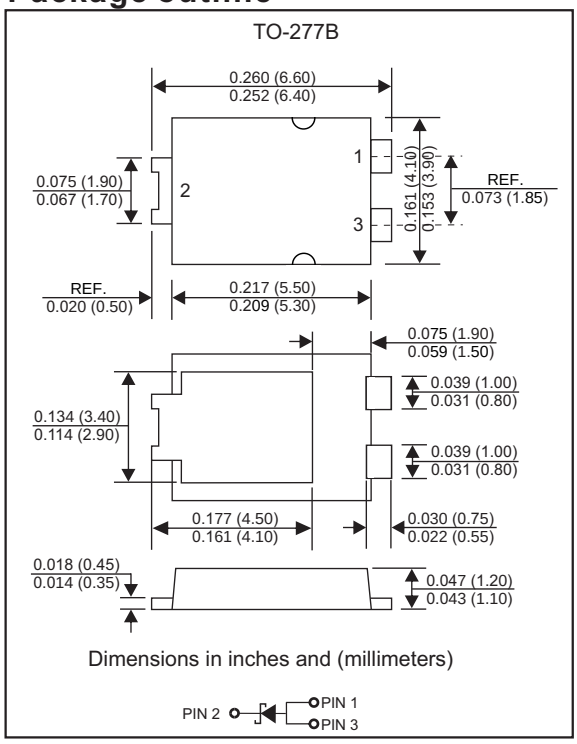
SL1545Y-T

15.0A Surface Mount
Schottky Barrier Rectifiers- 45V

Package outline



Features

- Ultra Low Forward Voltage Drop .
- Very low profile-typical height of 1.10mm
- Low Power Losses,High Efficiency Operation
- Low Thermal Resistance Package.
- High Operating Junction Temperature.
- Compliant to Halogen-free.

Mechanical data

- Epoxy:UL94-V0 rated flame retardant
- Case : TO-277B ,molded Plastic
- Terminals:Solderable per MIL-STD-750,Method 2026
- Marking:SL1545

Maximum ratings (AT T_A=25°C unless otherwise noted)

Parameter	Symbol	SL1545Y-T	Unit
DC Blocking Voltage Working Peak Reverse Voltage Repetitive Peak Reverse Voltage	V_{DC} V_{RWM} V_{RRM}	45.0	V
RMS Reverse Voltage	V_{RMS}	31.5	V
Average Forward Rectified Current	$I_{F(AV)}$	15.0	A
Peak Forward Surge Current,8.3ms Half Sine-wave(T_A=25°C)	I_{FSM}	250	A
Operating junction temperature range	T_J	-55 to +150	°C
Storage temperature range	T_{STG}	-55 to +150	°C

Electrical Characteristics (AT T_A=25°C unless otherwise noted)

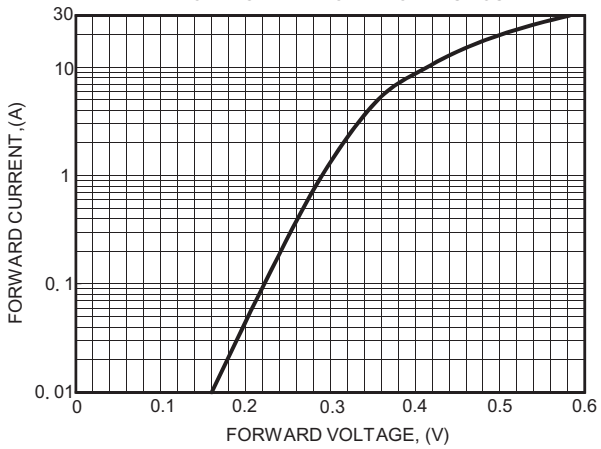
Parameter	Test Conditions	Symbol	MIN.	TYP.	MAX.	Unit
Reverse Breakdown Voltage	I_R=0.5mA,T_J=25°C	V_B	45	-	-	V
Forward voltage	I_F=15A,T_J=25°C	V_F	-	-	0.48	V
Reverse current	V_R=45V,T_J=25°C	I_R	-	-	0.5	mA
	V_R=45V,T_J=100°C		-	-	100	

Thermal Characteristics

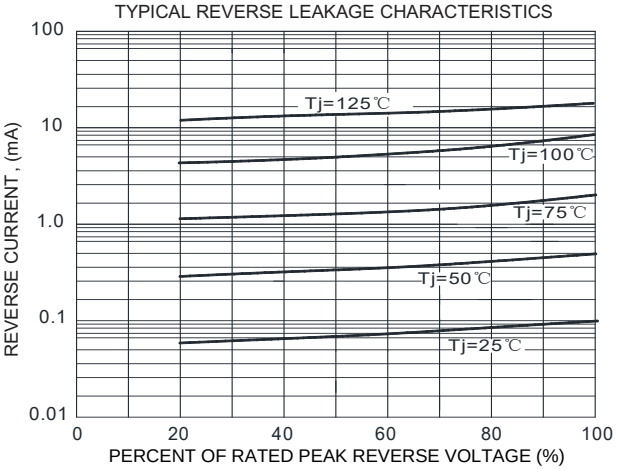
Parameter	Symbol	SL1545Y-T	Unit
Typical thermal resistance junction to ambient Typical thermal resistance junction to case	$R_{\theta JA}$ $R_{\theta JC}$	30 8	°C/W °C/W

Rating and characteristic curves

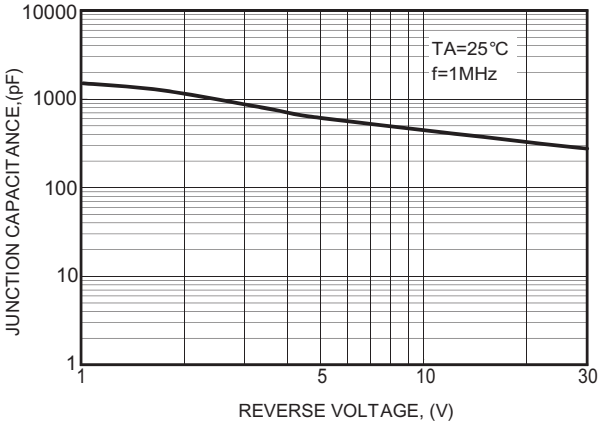
TYPICAL FORWARD CHARACTERISTICS



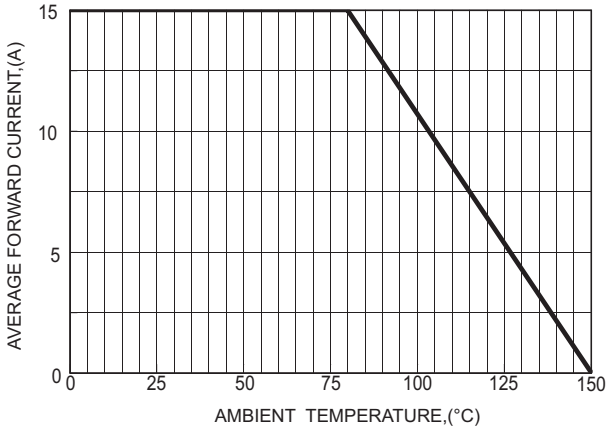
TYPICAL REVERSE LEAKAGE CHARACTERISTICS



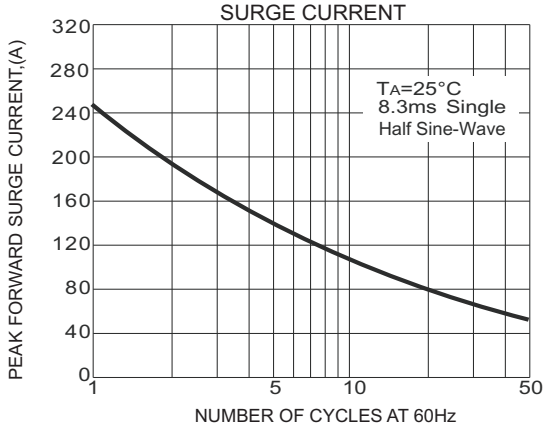
TYPICAL JUNCTION CAPACITANCE



TYPICAL FORWARD CURRENT DERATING CURVE



MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT



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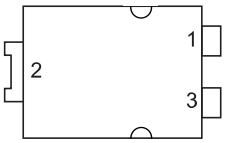
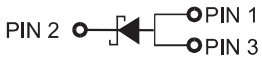
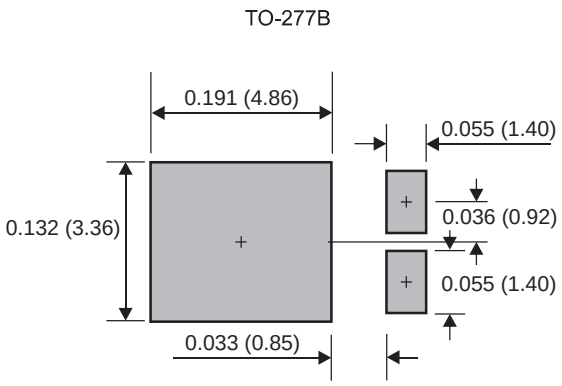
Pinning information

Pin	Simplified outline	Symbol
Pin2 cathode Pin1 anode Pin3 anode		

Marking

Type number	Marking code
SL1545Y-T	SL1545

Suggested solder pad layout



Dimensions in inches and (millimeters)

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AS-3070168	2023/10/21	2026/01/05	E	3