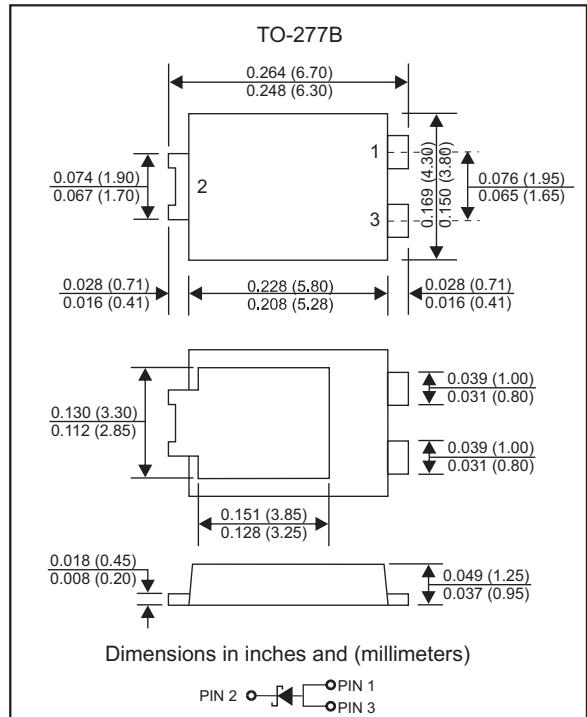


### Package outline



### 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:SL1045

### Maximum ratings (AT $T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	SL1045-T	Unit
DC Blocking Voltage	$V_{DC}$	45	V
Working Peak Reverse Voltage	$V_{RWM}$		
Repetitive Peak Reverse Voltage	$V_{RRM}$		
RMS Reverse Voltage	$V_{RMS}$	31.5	V
Average Forward Rectified Current	$I_{F(AV)}$	10.0	A
Peak Forward Surge Current,8.3ms Half Sine-wave( $T_A=25^\circ\text{C}$ )	$I_{FSM}$	250	A
Operating junction temperature range	$T_J$	-55 to +150	$^\circ\text{C}$
Storage temperature range	$T_{STG}$	-55 to +150	$^\circ\text{C}$

### Electrical Characteristics (AT $T_A=25^\circ\text{C}$ unless otherwise noted)

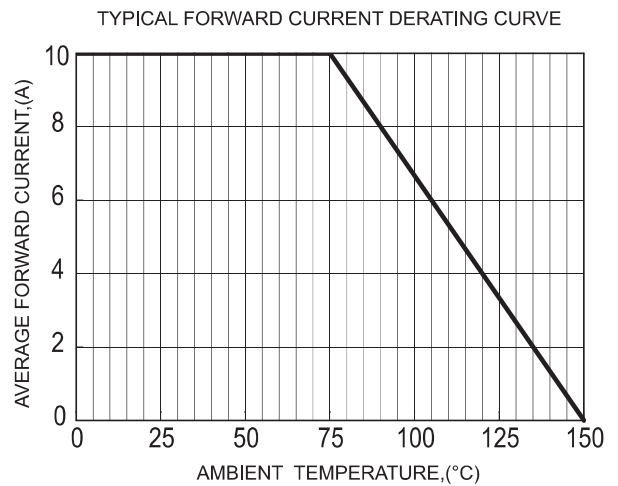
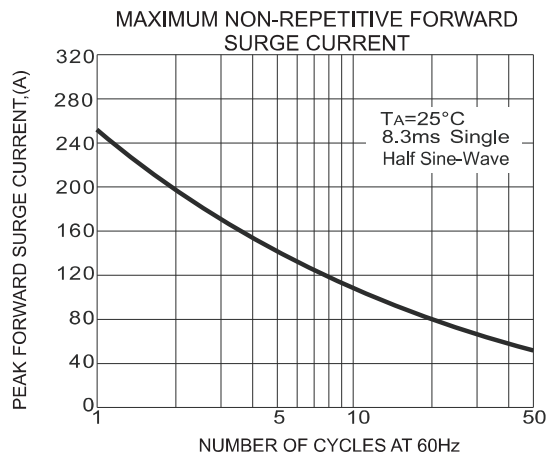
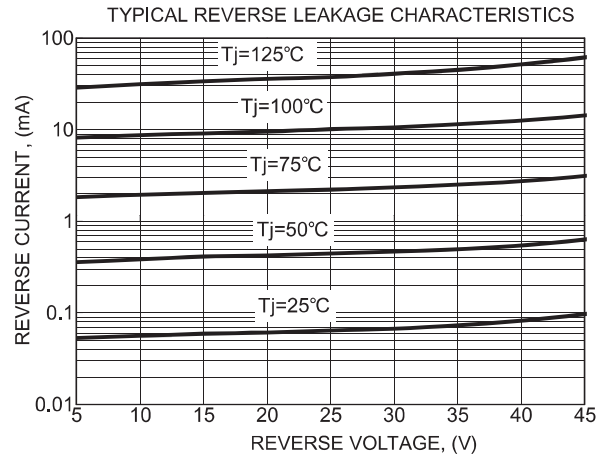
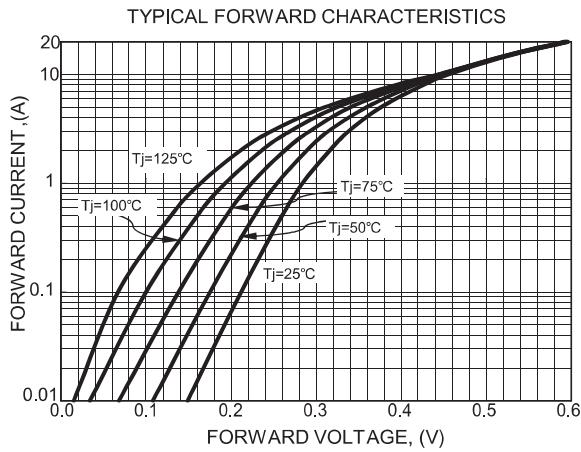
Parameter	Test Conditions	Symbol	MIN.	TYP.	MAX.	Unit
Reverse Breakdown Voltage	$I_R=0.5\text{mA}, T_J=25^\circ\text{C}$	$V_B$	45	-	-	V
Forward voltage	$I_F=8\text{A}, T_J=25^\circ\text{C}$	$V_F$	-	0.40	-	V
	$I_F=10\text{A}, T_J=25^\circ\text{C}$		-	0.42	0.45	
Reverse current	$V_R=45\text{V}, T_J=25^\circ\text{C}$	$I_R$	-	0.051	0.3	mA
	$V_R=45\text{V}, T_J=100^\circ\text{C}$		-	5	15	

### Thermal Characteristics


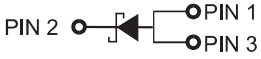
Parameter	Symbol	SL1045-T	Unit
Typical thermal resistance junction to ambient (Note 1)	$R_{\theta JA}$	80	$^\circ\text{C}/\text{W}$
Typical thermal resistance junction to case (Note 1)	$R_{\theta JC}$	15	$^\circ\text{C}/\text{W}$

Note 1: Mounted on FR-4 PCB copper pad area. Cathode pad dimensions 4.95mm x 3.4mm.  
Anode pad dimensions 1 55mm x 5 0mm.

### Rating and characteristic curves



### Pinning information

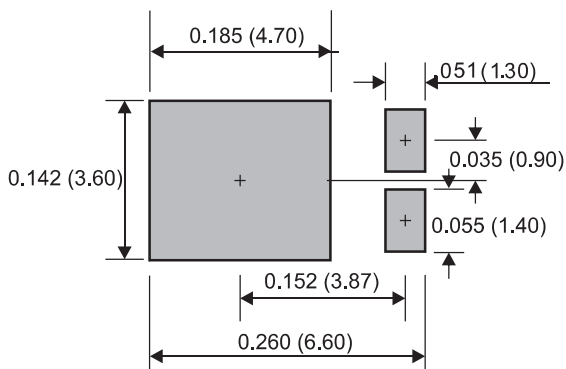
Pin	Simplified outline	Symbol
Pin2 cathode Pin1 anode Pin3 anode		

### Marking

Type number	Marking code
SL1045-T	SL1045

### Suggested solder pad layout

TO-277B



Dimensions in inches and (millimeters)