

# FM15L45

## 15.0A Surface Mount Schottky Barrier Rectifiers- 45V

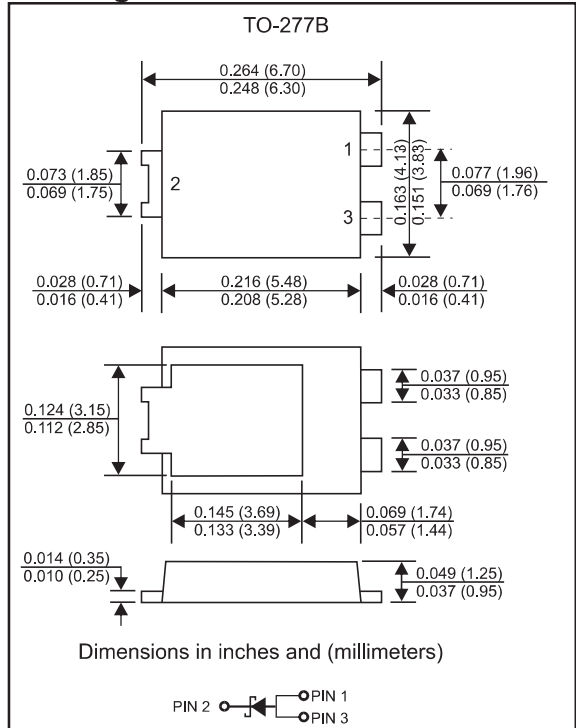
### Features

- 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
- Weight:0.093 grams(approx)

### Package outline



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

Parameter	Symbol	FM15L45	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	$I_{F(AV)}$	15.0	A
Peak Forward Surge Current,8.3ms Half Sine-wave( $T_A=25^{\circ}\text{C}$ )	$I_{FSM}$	275	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)

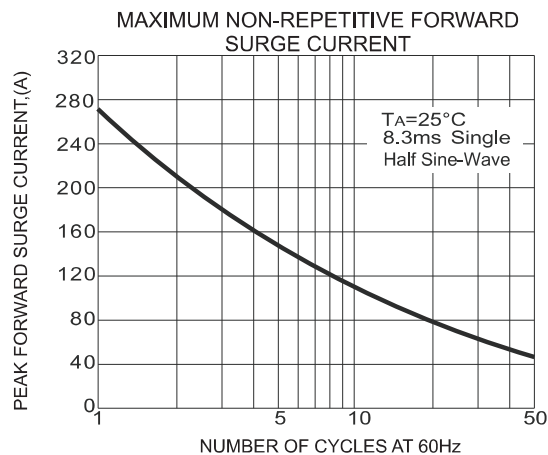
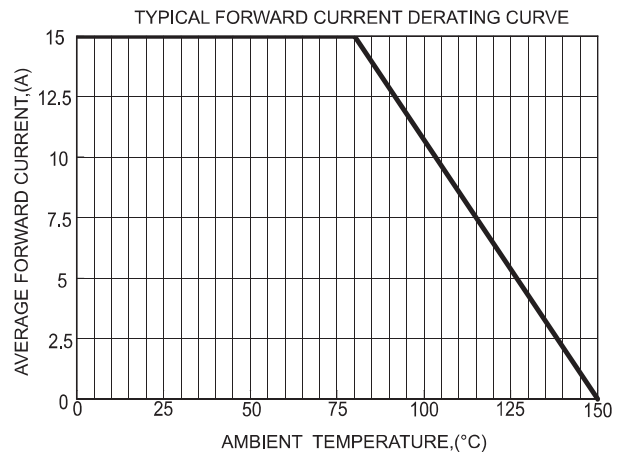
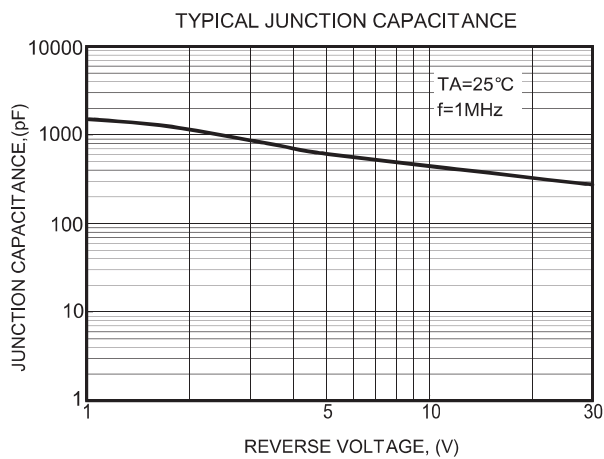
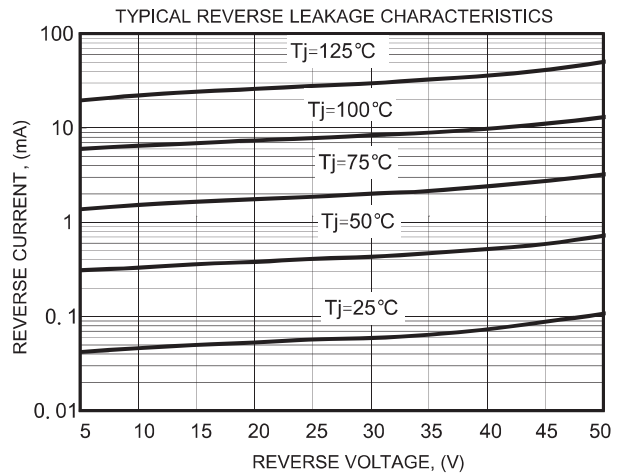
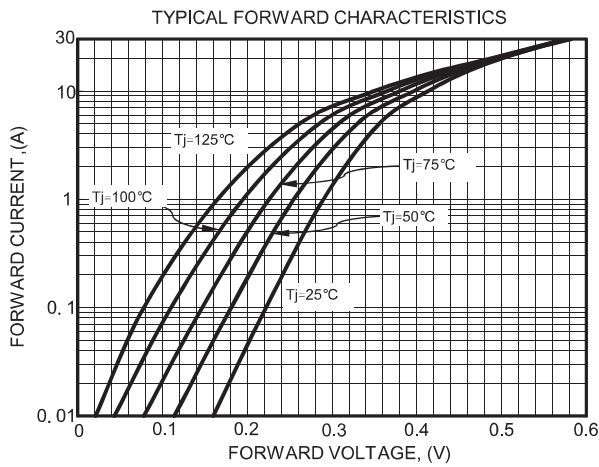
Parameter	Test Conditions	Symbol	MIN.	TYP.	MAX.	Unit
Reverse Breakdown Voltage	$I_R=0.5\text{mA}, T_J=25^{\circ}\text{C}$	$V_B$	45	-	-	V
Forward voltage	$I_F=7.5\text{A}, T_J=25^{\circ}\text{C}$	$V_F$	-	0.41	-	V
	$I_F=15\text{A}, T_J=25^{\circ}\text{C}$		-	0.45	0.48	
Reverse current	$V_R=45\text{V}, T_J=25^{\circ}\text{C}$	$I_R$	-	0.051	0.3	mA
	$V_R=45\text{V}, T_J=100^{\circ}\text{C}$		-	5	15	
	$V_R=45\text{V}, T_J=150^{\circ}\text{C}$		-	27	75	

### Thermal Characteristics

Parameter	Symbol	FM15L45	Unit
Typical thermal resistance junction to ambient	$R_{\theta JA}$	31	$^{\circ}\text{C}/\text{W}$
Typical thermal resistance junction to case	$R_{\theta JC}$	5	$^{\circ}\text{C}/\text{W}$


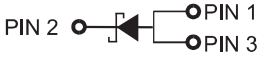
Note : Polyimide PCB, 2oz.Copper,Cathode pad dimensions 18.8mm x 14.4mm,Anode pad dimensions 5.6mm x 14.4mm.

## Rating and characteristic curves

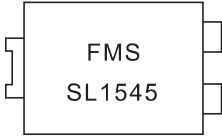


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## Pinning information

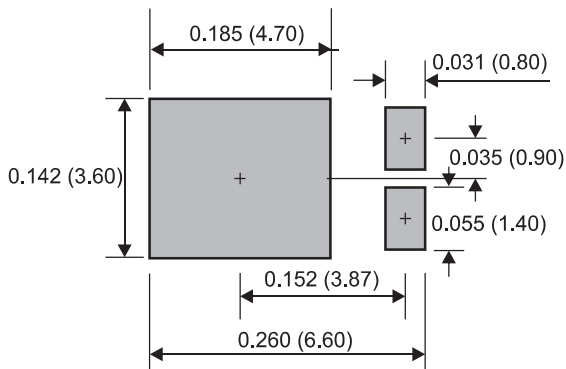
Pin	Simplified outline	Symbol
Pin2 cathode Pin1 anode Pin3 anode		

## Marking

Type number	Marking code
FM15L45	

## Suggested solder pad layout

TO-277B



Dimensions in inches and (millimeters)