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SBR8U60P5-7-FS

8.0A Low VF Surface Mount Schottky Barrier Rectifiers - 60V

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.

TO-277B



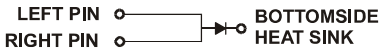
Top View



Bottom View

Mechanical data

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



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

Parameter	Symbol	SBR8U60P5-7-FS	Unit
DC Blocking Voltage Working Peak Reverse Voltage Repetitive Peak Reverse Voltage	V_{DC} V_{RWM} V_{RRM}	60	V
RMS Reverse Voltage	V_{RMS}	42	V
Average Forward Rectified Current	$I_{F(AV)}$	8	A
Peak Forward Surge Current,8.3ms Half Sine-wave(T_A=25°C)	I_{FSM}	275	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	T_J=25°C	V_B	60	-	-	V
Forward voltage	I_F= 8A,T_J=25°C	V_F		0.46	0.53	V
	I_F= 8A,T_J=125°C				0.50	
Reverse current	T_J=25°C	I_R			0.15	mA
	T_J=125°C				15	

Thermal Characteristics

Parameter	Symbol	SBR8U60P5-7-FS	Unit
Typical thermal resistance junction to ambient ,Note 1 Typical thermal resistance junction to lead, Note 2	$R_{\theta JA}$ $R_{\theta JA}$	80 25	°C/W °C/W

Note : 1.FR-4 PCB, 2oz.Copper.
2.Polymide PCB, 2oz.Copper.Cathode pad dimensions 18.8mm x 14.4mm.Anode pad dimensions 5.6mm x 14.4mm.

Rating and characteristic curves

Fig.1 - Forward Current Derating Curve

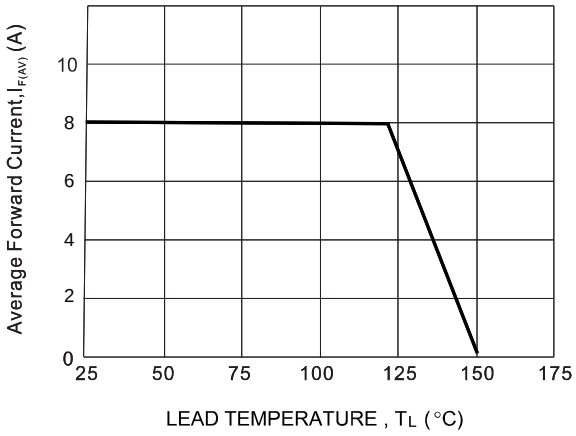


Fig. 2 Typical Forward Characteristics (per leg)

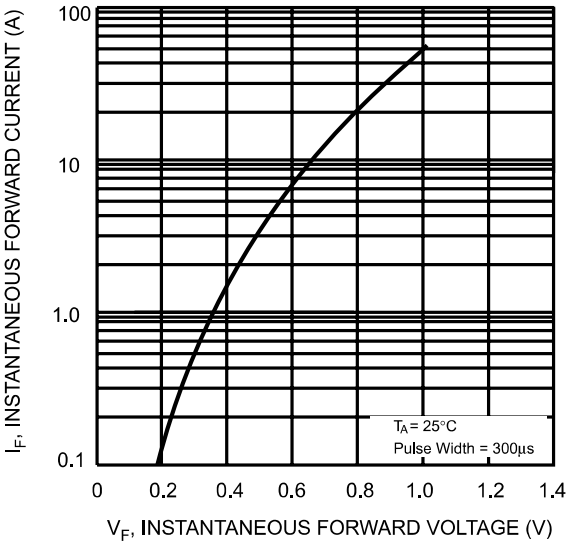


Fig. 3 Maximum Peak Forward Surge Current (per leg)

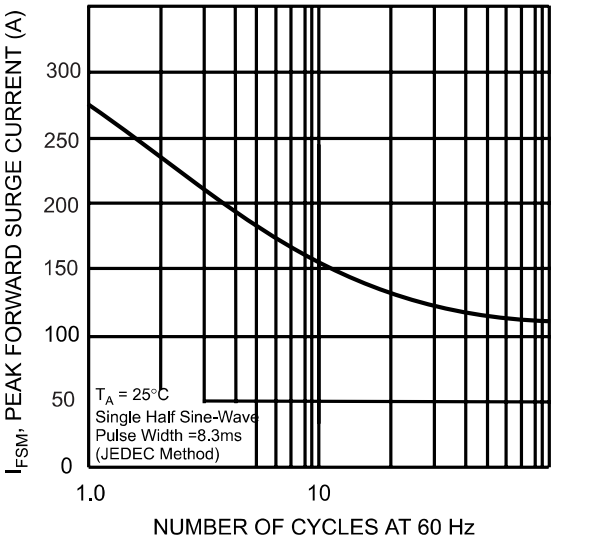
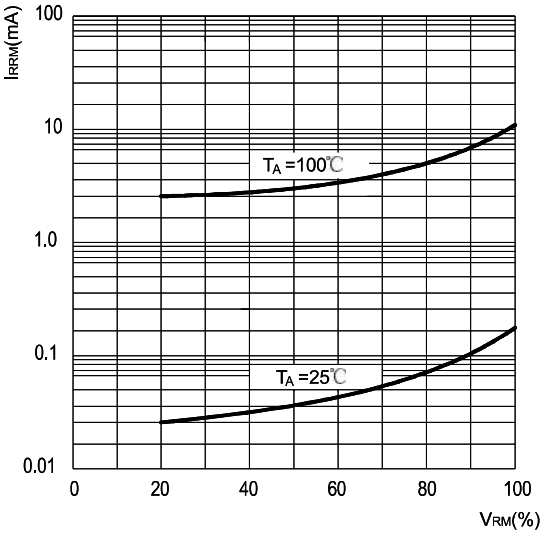


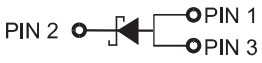
Fig4: Typical Reverse Characteristics



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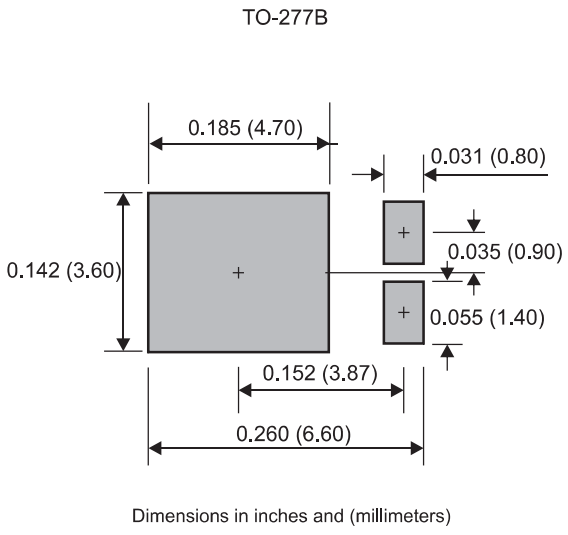
Pinning information

Pin	Simplified outline	Symbol
Pin2 cathode Pin1 anode Pin3 anode		

Marking

Type number	Marking code
SBR8U60P5-7-FS	

Suggested solder pad layout



Dimensions in inches and (millimeters)

Package outline

