FUXINSEMI
INNOVATOR IN SEMICONDUCTOR

SS5P6

5.0A Surface Mount Schottky Barrier Rectifiers -60V

Features

- 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



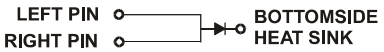
Top View



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	SS5P6	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	$I_{F(AV)}$	5	A
Peak Forward Surge Current,8.3ms Half Sine-wave(T_A=25°C)	I_{FSM}	150	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= 5 A,T_J=25°C	V_F			0.69	V
	I_F= 5A,T_J= 125°C				0.62	
Reverse current	T_J=25°C	I_R			0.1	mA
	T_J= 125°C				15	

Thermal Characteristics

Parameter	Symbol	SS5P6	Unit
Typical thermal resistance junction to ambient ,Note 1 Typical thermal resistance junction to lead, Note 2	$R_{\theta JA}$ $R_{\theta JL}$	65 10	°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.

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Rating and characteristic curves

FIG. 1- FORWARD CURRENT DERATING CURVE

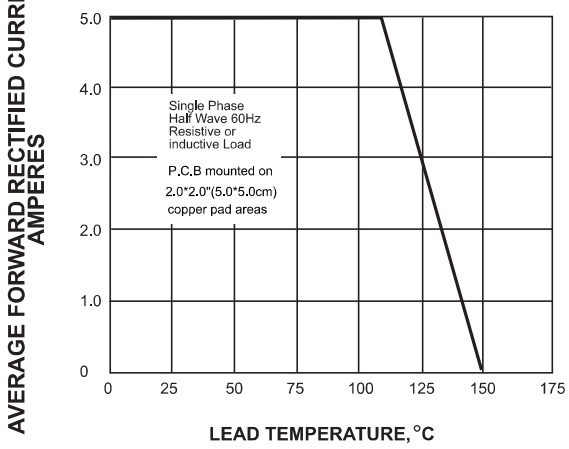


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

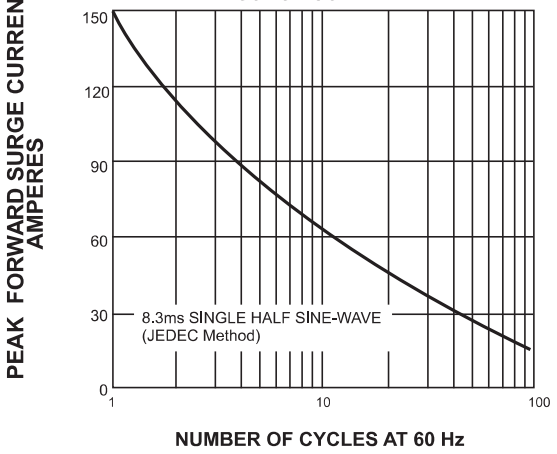


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

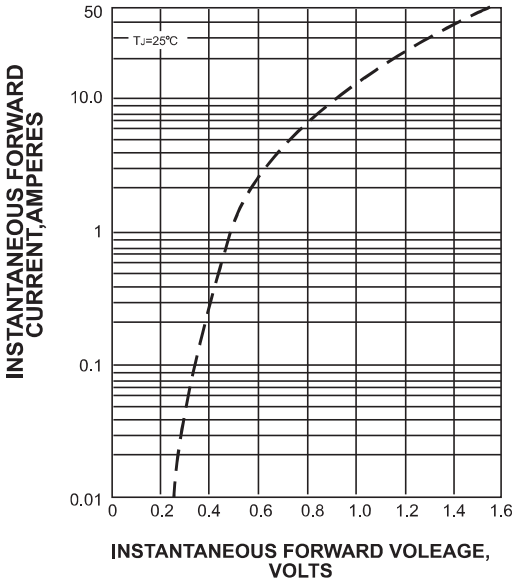


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

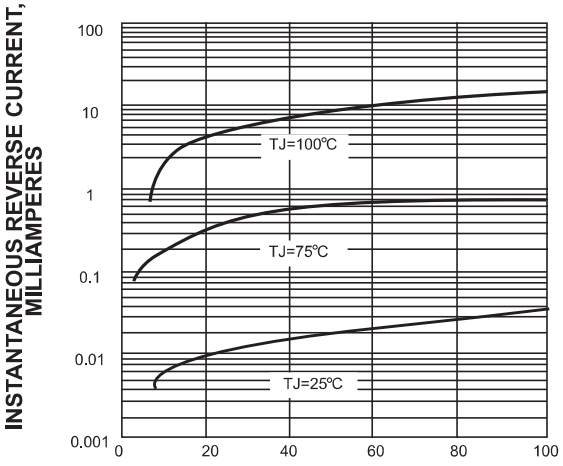


FIG. 5-TYPICAL JUNCTION CAPACITANCE

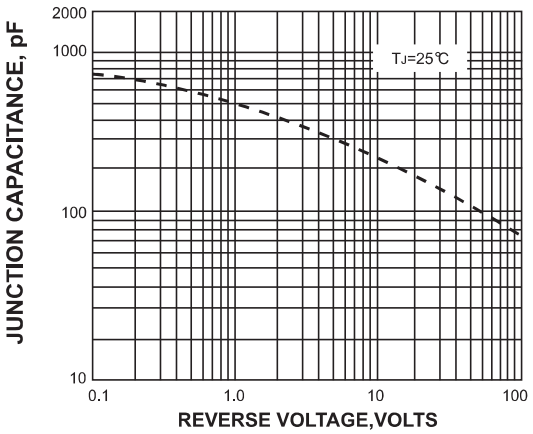
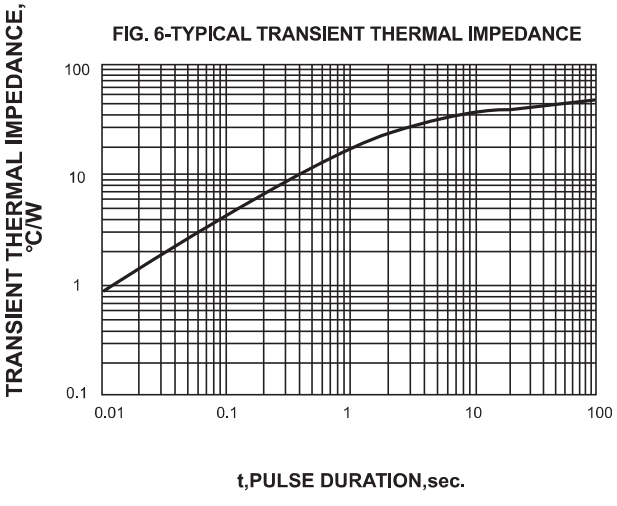


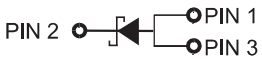
FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE



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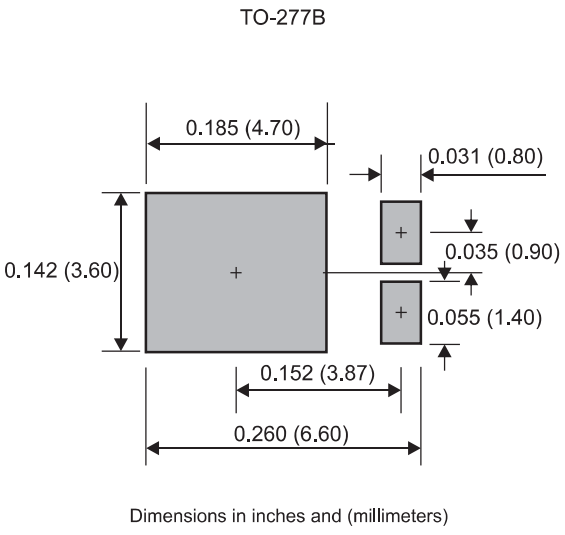
Pinning information

Pin	Simplified outline	Symbol
Pin2 cathode Pin1 anode Pin3 anode		

Marking

Type number	Marking code
SS5P6	

Suggested solder pad layout



Dimensions in inches and (millimeters)

Package outline

