

SV1040

SCHOTTKY BARRIER RECTIFIER

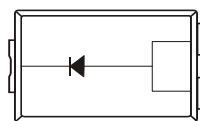
VOLTAGE 40 Volt **CURRENT** 10 Ampere

FEATURES

- Ideal for automated placement
- High efficiency Operation
- Low thermal resistance
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std. . (Halogen Free)

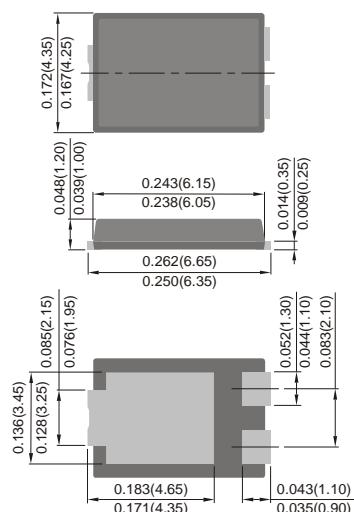
MECHANICAL DATA

- Case : TO-277, Plastic
- Terminals : Solderable per MIL-STD-750, Method 2026
- Weight: 0.0037 ounces, 0.1073 grams
- Marking: SV1040



TO-277

Unit : inch(mm)



ABSOLUTE MAXIMUM RATINGS (TA=25°C unless otherwise noted)

PARAMETER	SYMBOL	VALUE	UNIT
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	40	V
Maximum RMS Voltage	V _{RMS}	28	V
Maximum DC Blocking Voltage	V _R	40	V
Average Rectified Output Current @T _L =125°C	I _{F(AV)}	10	A
Peak Forward Surge Current : 8.3ms Single Half Sine-Wave Superimposed On Rated Load	I _{FSM}	300	A
Typical Thermal Resistance, Junction to Ambient Junction to Lead	R _{θJA} R _{θJL}	60 4	°C/W
Operating Junction Temperature and Storage Temperature range	T _{J,T_{STG}}	-55 to + 150	°C

Notes :

1. Mounted on 2cm² FR-4 PCB.
2. Mounted on 50cm² copper pad area.

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ELECTRICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$ unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN.	TYP.	MAX.	UNIT
Breakdown voltage	V_{BR}	$I_R=1\text{mA}$ $T_A=25^\circ\text{C}$	40	-	-	V
Instantaneous forward voltage	V_F	$I_F=5\text{A}$ $T_A=25^\circ\text{C}$	-	0.44	-	V
		$I_F=10\text{A}$ $T_A=25^\circ\text{C}$	-	0.47	0.51	V
Reverse current	I_R	$V_R=32\text{V}$ $T_A=25^\circ\text{C}$	-	32	-	μA
		$V_R=40\text{V}$ $T_A=25^\circ\text{C}$ $T_A=125^\circ\text{C}$	-	32	0.7	mA

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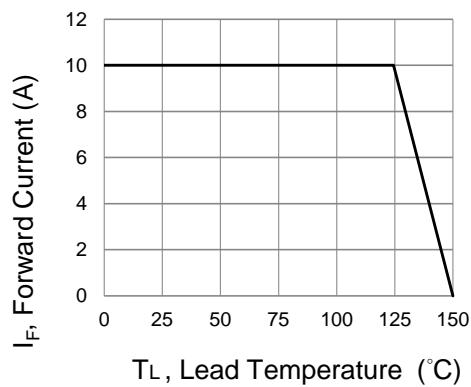


Fig.1 Forward Current Derating Curve

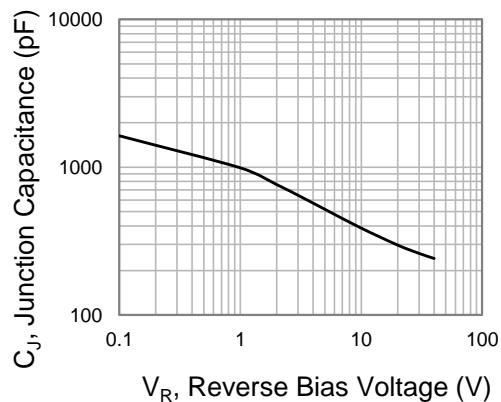


Fig.2 Typical Junction Capacitance

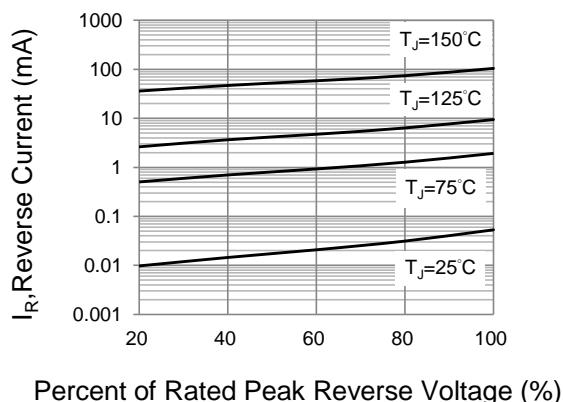


Fig.3 Typical Reverse Characteristics

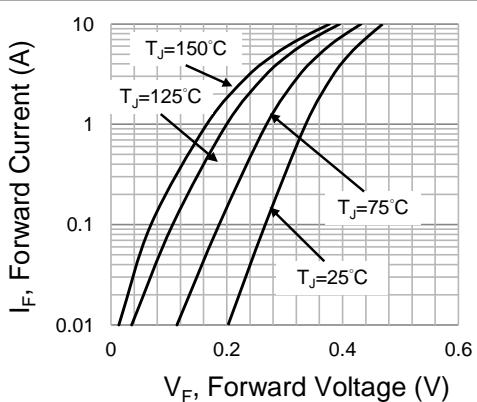


Fig.4 Typical Forward Characteristics

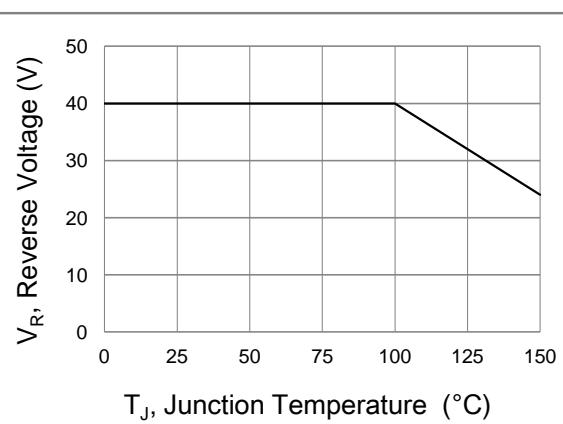
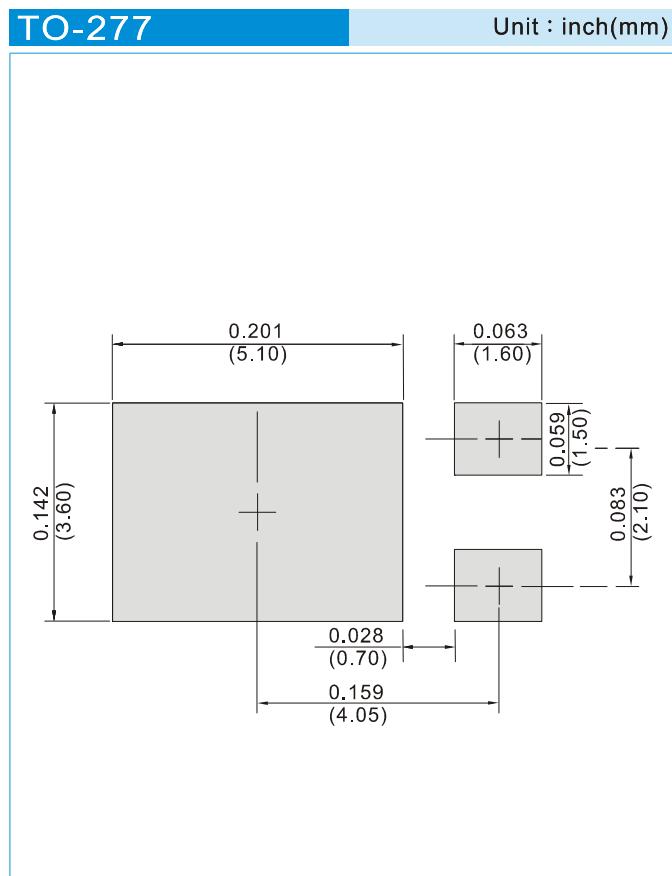


Fig.5 Operating Temperature Derating

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MOUNTING PAD LAYOUT



ORDER INFORMATION

- Packing information
T/R - 5K per 13" plastic Reel

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