



SV1045

SCHOTTKY BARRIER RECTIFIER

VOLTAGE 45 Volts **CURRENT** 10 Amperes

TO-277 Unit : inch(mm)

FEATURES

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

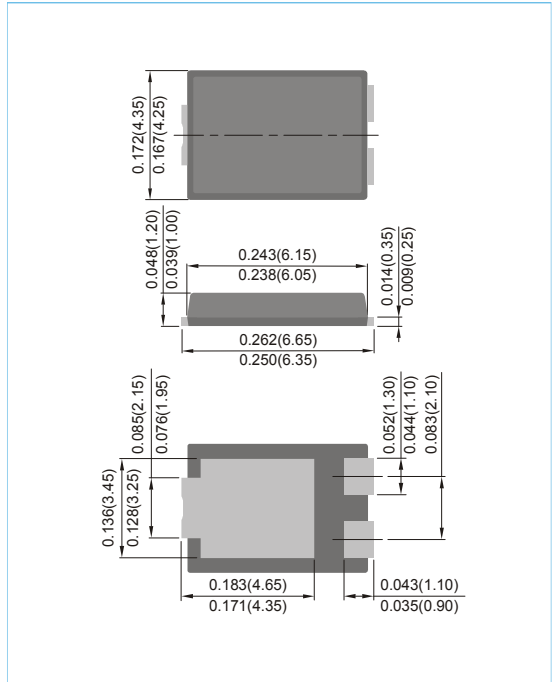
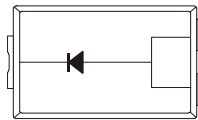
MECHANICAL DATA

Case : TO-277, Plastic

Terminals : Solderable per MIL-STD-750, Method 2026

Weight : 0.0037 ounces, 0.1073 grams

Marking : SV1045



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

PARAMETER	SYMBOL	VALUE	UNIT
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	45	V
Maximum RMS Voltage	V _{RMS}	32	V
Maximum DC Blocking Voltage	V _R	45	V
Maximum Average Rectified Output Current	I _{F(AV)}	10	A
Peak forward Surge Current : 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	300	A
Typical Thermal Resistance, Junction to Ambient (Notes 1)	R _{θJA}	36	°C/W
Junction to Lead (Notes 1)	R _{θJL}	7	°C/W
Operating Junction Temperature and Storage Temperature range	T _J , T _{STG}	-55 to + 150	°C

Notes :

1. Mounted on 48cm² FR-4 PCB.



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ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN.	TYP.	MAX.	UNIT
Breakdown voltage	V _{BR}	I _R =0.5mA T _A =25°C	45	-	-	V
Instantaneous forward voltage	V _F	I _F =3A T _A =25°C	-	0.43	-	V
		I _F =5A T _A =25°C	-	0.46	-	
		I _F =10A T _A =25°C	-	0.50	0.55	
		I _F =3A T _A =125°C	-	0.30	-	V
I _F =5A T _A =125°C	-	0.34	-			
I _F =10A T _A =125°C	-	0.42	-			
Reverse current	I _R	V _R =36V T _A =25°C	-	5	-	μA
		V _R =45V T _A =25°C	-	-	50	μA
		V _R =45V T _A =125°C	-	9	-	mA

RATING AND CHARACTERISTIC CURVES

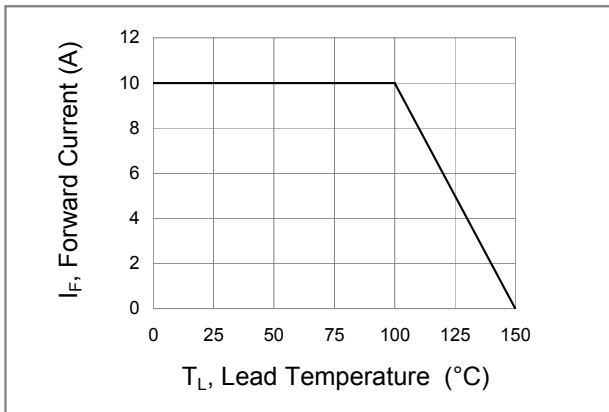


Fig.1 Forward Current Derating Curve

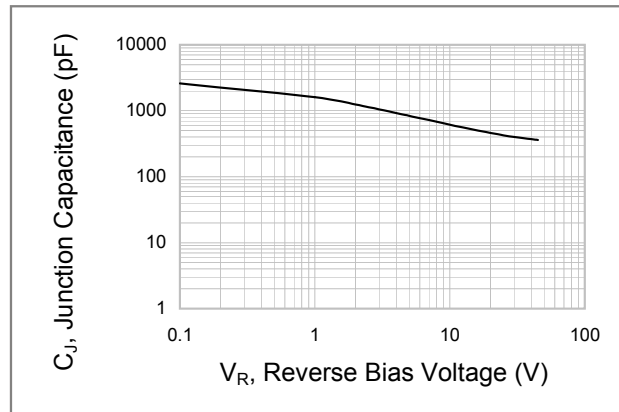


Fig.2 Typical Junction Capacitance

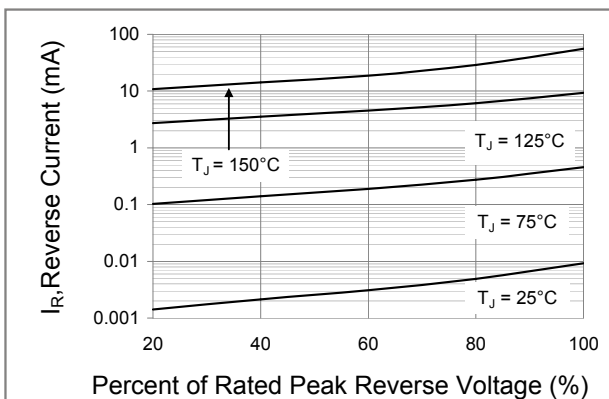


Fig.3 Typical Reverse Characteristics

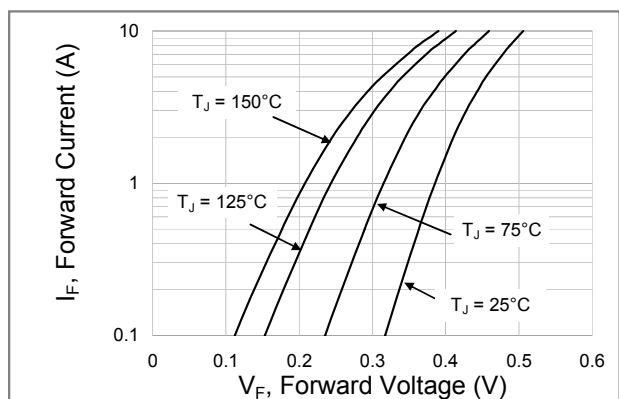
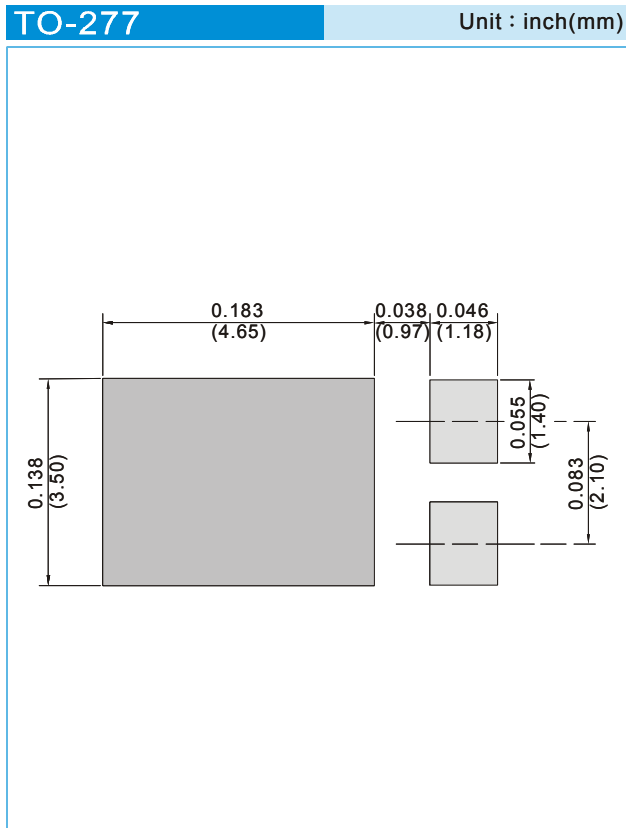


Fig.4 Typical Forward Characteristics



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MOUNTING PAD LAYOUT



ORDER INFORMATION

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



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Part No_packing code_Version

SV1045_R2_00001

SV1045_10001

For example :

RB500V-40 **R2** **00001**

Part No.

Serial number

Version code means HF

Packing size code means 13"

Packing type means T/R

Packing Code XX				Version Code XXXXX		
Packing type	1 st Code	Packing size code	2 nd Code	HF or RoHS	1 st Code	2 nd ~5 th Code
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			



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