

SVM1045V

LOW VF SCHOTTKY RECTIFIER

VOLTAGE 45 Volts **CURRENT** 10 Amperes

FEATURES

- Ideal for automated placement
- Low forward voltage drop, low power losses
- High efficiency Operation
- Low thermal resistance
- Lead free in comply with EU RoHS 2002/95/EC directives.
- Green molding compound as per IEC61249 Std. . (Halogen Free)

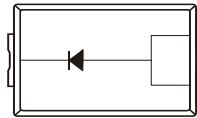
MECHANICAL DATA

Case : TO-277, Plastic

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

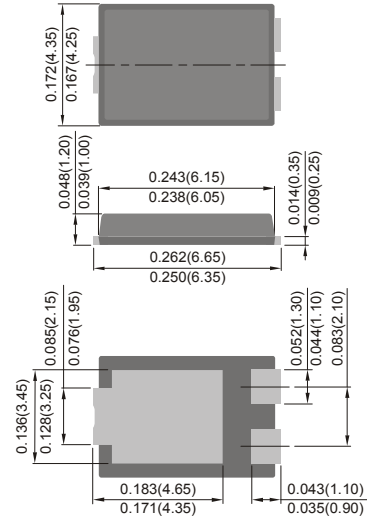
Weight: 0.0037 ounces, 0.1073 grams

Marking:SVM1045V



TO-277

Unit : inch(mm)



MAXIMUM RATINGS(T_A=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
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}	275	A
Typical Thermal Resistance ,Junction to Ambient (Note 1)	R _{ΘJA}	60	°C/W
Junction to Case (Note 1)	R _{ΘJC}	8	
Operating junction temperature range and Storage temperature range	T _J ,T _{STG}	-55 to + 150	°C

NOTE:

- 1.Mounted on 50cm² FR-4 PCB.

SVM1045V

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

PARAMETER	SYMBOL	TEST CONDITIONS	MIN.	TYP.	MAX.	UNIT
Breakdown voltage	V_{BR}	$I_R=0.5\text{mA}$ $T_A=25^\circ\text{C}$	45	-	-	V
Instantaneous forward voltage	V_F	$I_F=3\text{A}$ $T_A=25^\circ\text{C}$	-	0.34	-	V
		$I_F=5\text{A}$ $T_A=25^\circ\text{C}$	-	0.38	-	V
		$I_F=10\text{A}$ $T_A=25^\circ\text{C}$	-	0.44	0.47	V
		$I_F=3\text{A}$ $T_A=125^\circ\text{C}$	-	0.27	-	V
		$I_F=5\text{A}$ $T_A=125^\circ\text{C}$	-	0.32	-	V
		$I_F=10\text{A}$ $T_A=125^\circ\text{C}$	-	0.41	-	V
Reverse current	I_R	$V_R=36\text{V}$ $T_A=25^\circ\text{C}$	-	32	-	μA
		$V_R=45\text{V}$ $T_A=25^\circ\text{C}$ $T_A=125^\circ\text{C}$	-	- 8.6	0.25 -	mA mA

RATING AND CHARACTERISTIC CURVES

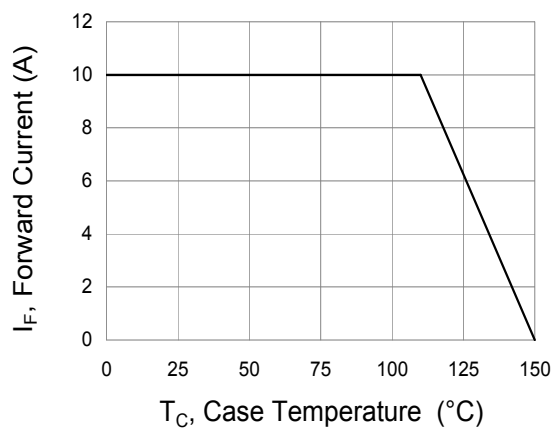


Fig.1 Forward Current Derating Curve

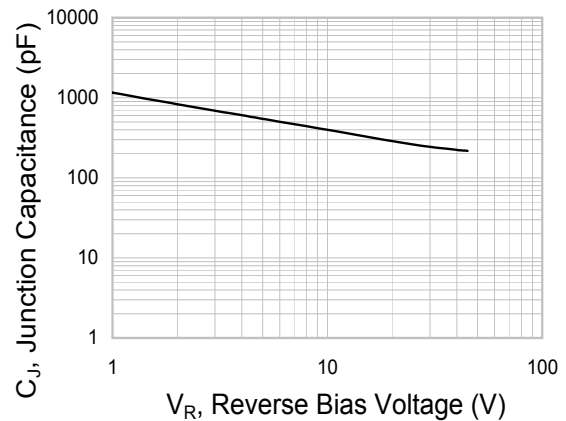


Fig.2 Typical Junction Capacitance

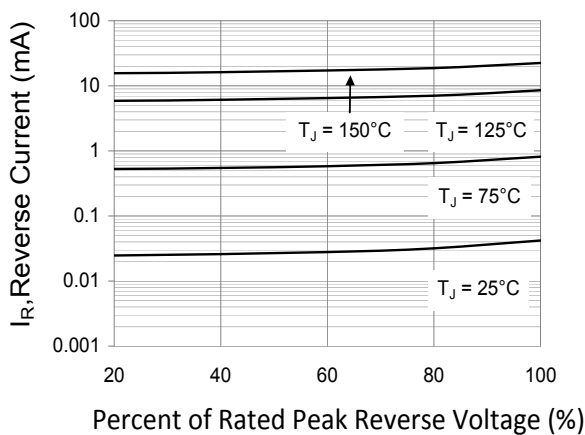


Fig.3 Typical Reverse Characteristics

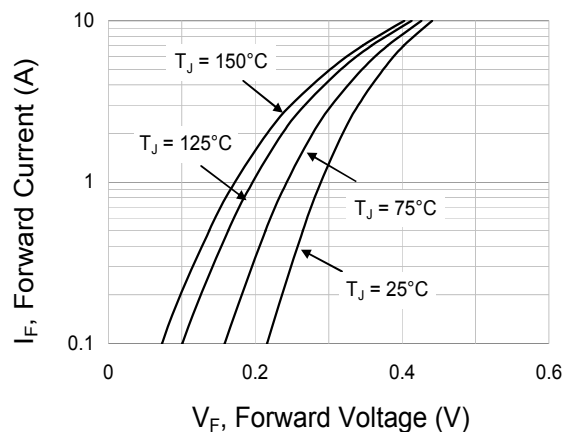
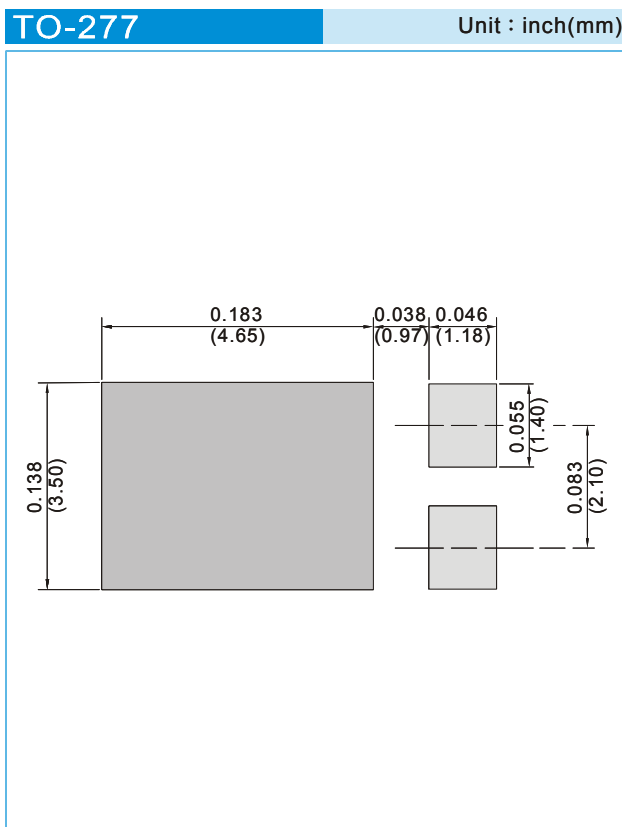


Fig.4 Typical Forward Characteristics

SVM1045V

MOUNTING PAD LAYOUT



ORDER INFORMATION

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

LEGAL STATEMENT

Copyright PanJit International, Inc 2012

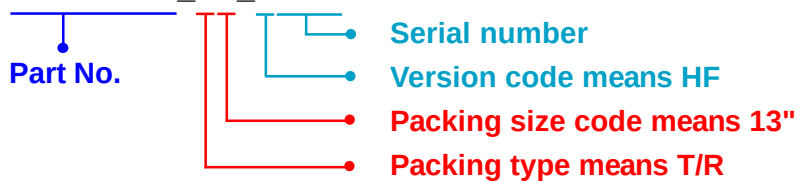
The information presented in this document is believed to be accurate and reliable. The specifications and information herein are subject to change without notice. Pan Jit makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose. Pan Jit products are not authorized for use in life support devices or systems. Pan Jit does not convey any license under its patent rights or rights of others.



SVM1045V

For example :

RB500V-40_R2_00001



Packing Code XX				Version Code XXXXXX		
Packing type	1 st Code	Packing size code	2 nd Code	HF or RoHS	1 st Code	2 nd ~5 th Code
T/B	A	N/A	0	HF	0	serial number
T/R	R	7"	1	RoHS	1	serial number
B/P	B	13"	2			
T/P	T	26mm	X			
TRR	S	52mm	Y			
TRL	L	PBCU	U			
FORMING	F	PBCD	D			

Part No_packing code_Version

SVM1045V_R2_00001

SVM1045V_00001