



SVM860U

EXTREME LOW VF SCHOTTKY BARRIER RECTIFIER

VOLTAGE 60 Volt

CURRENT 8 Ampere

TO-277

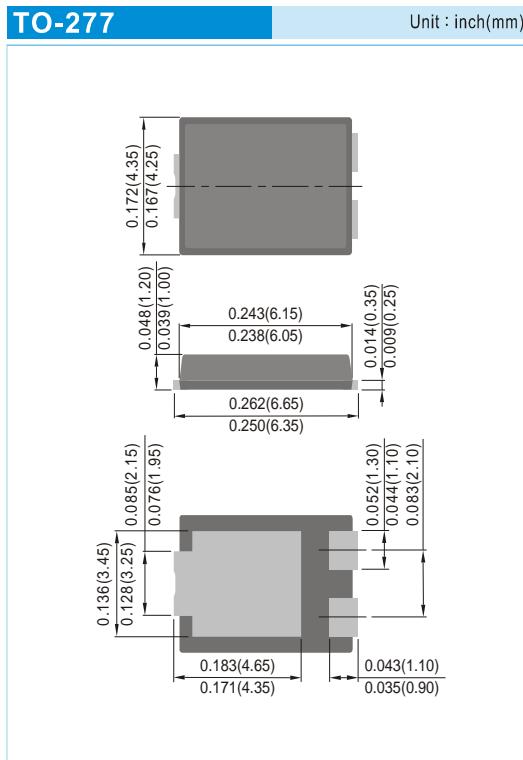
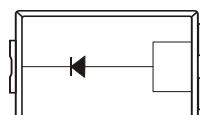
Unit : inch(mm)

FEATURES

- Ideal for automated placement
- Extreme low forward voltage drop, low power loss
- High efficiency operation
- Low thermal resistance
- Ultra Thin Profile Package for Space Constrained Utilization
- Package suitable for Automated Handling
- 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 : Part number



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

PARAMETER	SYMBOL	VALUE	UNIT
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	60	V
Maximum RMS Voltage	V _{RMS}	42	V
Maximum DC Blocking Voltage	V _R	60	V
Maximum Average Rectified Output Current	I _{F(AV)}	8	A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	200	A
Typical Thermal Resistance, Junction to Case (Note 1) Junction to Ambient (Note 1)	R _{θJC} R _{θJA}	9 33	°C/W
Operating Junction Temperature and Storage Temperature range	T _{J,TSTG}	-55 to + 150	°C

NOTE : 1.Mounted on 50cm² (2oz) Copper pad rea.



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

PARAMETER	SYMBOL	TEST CONDITIONS	MIN.	TYP.	MAX.	UNIT
Break down voltage	V_{BR}	$I_R=0.5mA$ $T_A=25^\circ C$	60	-	-	V
Instantaneous forward voltage	V_F	$I_F=0.1A$ $T_A=25^\circ C$	-	0.21	-	
		$I_F=1A$ $T_A=25^\circ C$	-	0.29	0.35	V
		$I_F=4A$ $T_A=25^\circ C$	-	0.39	-	
		$I_F=8A$ $T_A=25^\circ C$	-	0.47	0.53	
	V_F	$I_F=0.1A$ $T_A=125^\circ C$	-	0.1	-	
		$I_F=1A$ $T_A=125^\circ C$	-	0.2	-	V
		$I_F=4A$ $T_A=125^\circ C$	-	0.34	-	
		$I_F=8A$ $T_A=125^\circ C$	-	-	-	
Reverse current	I_R	$V_R=48V$ $T_A=25^\circ C$	-	55	-	μA
		$V_R=60V$ $T_A=25^\circ C$	-	0.1	0.25	mA
		$T_A=125^\circ C$	-	20	-	mA



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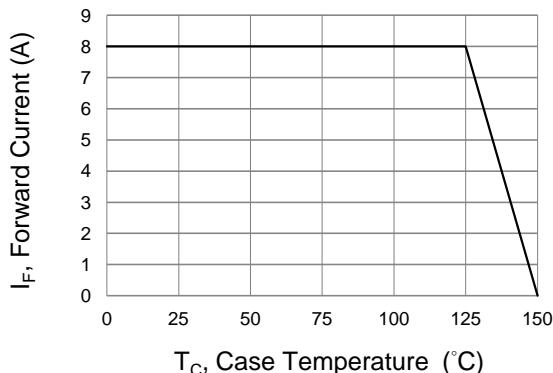


Fig.1 Forward Current Derating Curve

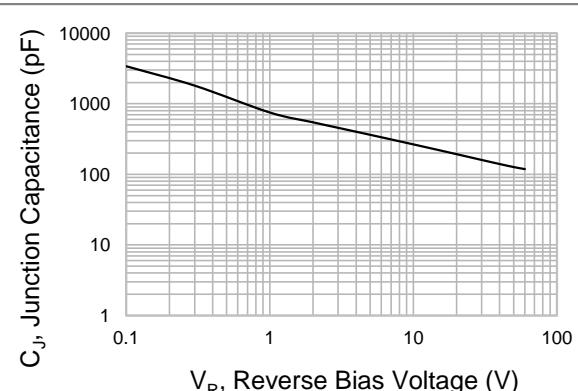


Fig.2 Typical Junction Capacitance

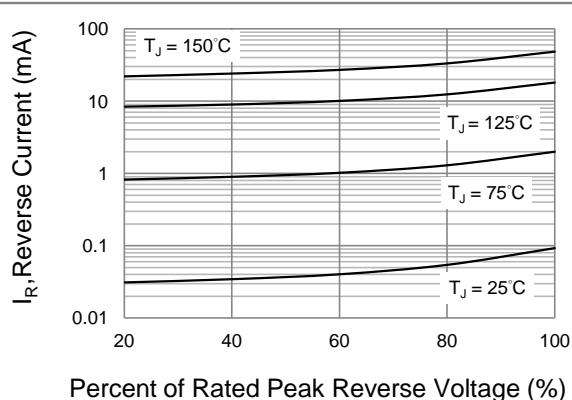


Fig.3 Typical Reverse Characteristics

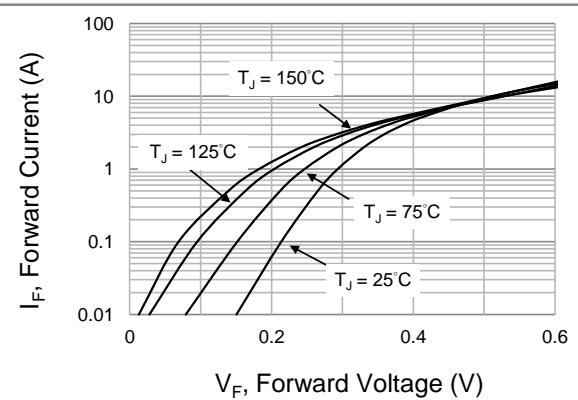


Fig.4 Typical Forward Characteristics

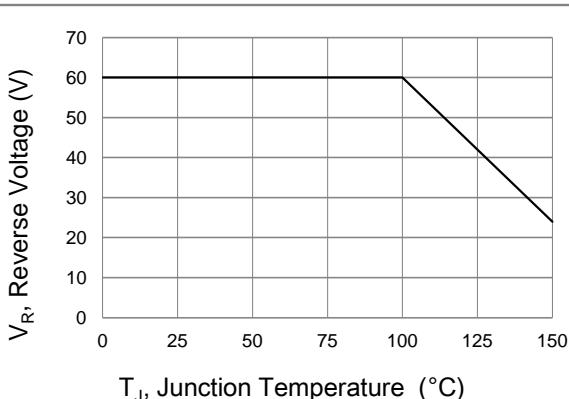
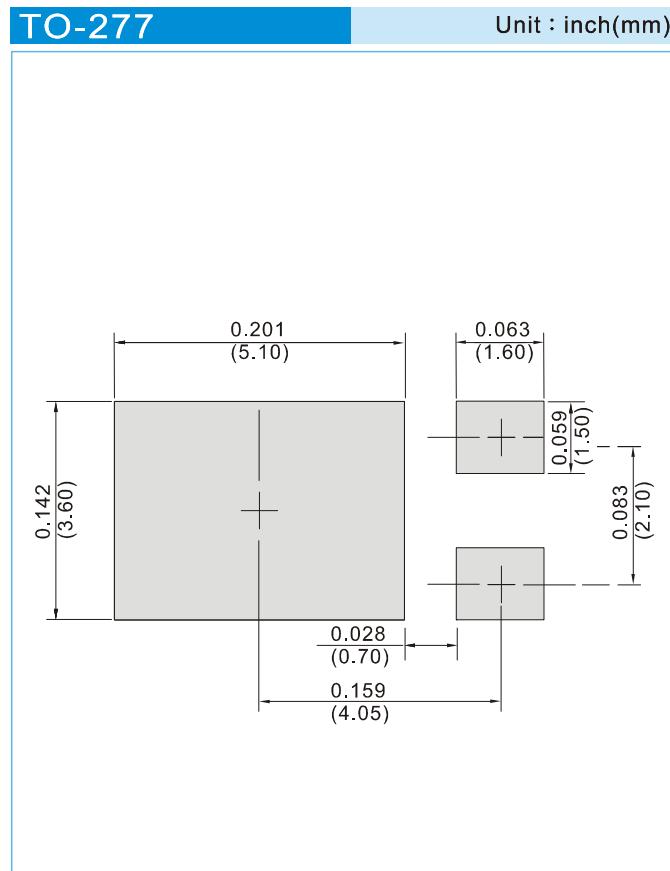


Fig.5 Operating Temperature Derating Curve



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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

SVM860U_R2_00001

For example :

RB500V-40_R2_00001



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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