



SVT20100UA

EXTREME LOW VF SCHOTTKY BARRIER RECTIFIER

Voltage

100 V

Current

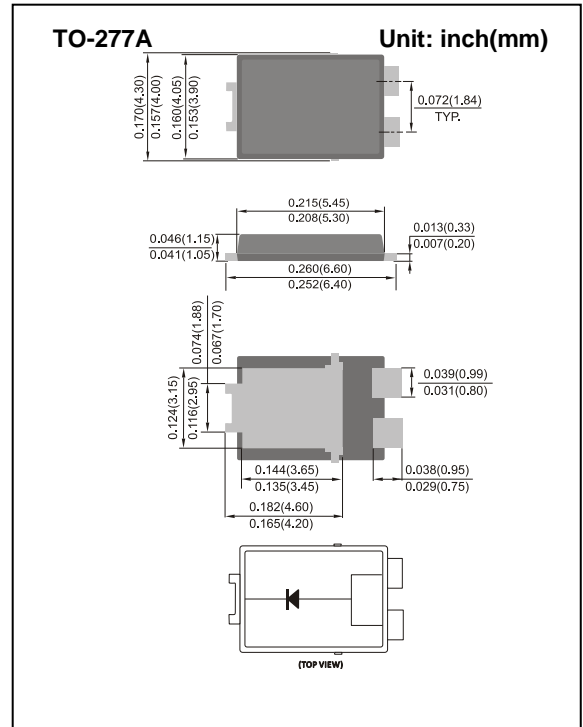
20 A

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
- Easy pick and place 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-277A package
- Terminals: solder plated, solderable per MIL-STD-750, Method 2026
- Weight: 0.003 ounces, 0.0855 grams.



Maximum Ratings And Electrical Characteristics ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

PARAMETER	SYMBOL	LIMIT	UNIT
Maximum repetitive peak reverse voltage	V_{RRM}	100	V
Maximum rms voltage	V_{RMS}	70	V
Maximum dc blocking voltage	V_R	100	V
Maximum average forward rectified current	$I_{F(AV)}$	20	A
Peak forward surge current : 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	250	A
Typical thermal resistance	(Note 1) $R_{\theta JA}$	110	$^{\circ}\text{C/W}$
	(Note 2) $R_{\theta JC}$	3	
Operating junction temperature range	T_J	-55 to +150	$^{\circ}\text{C}$
Storage temperature range	T_{STG}	-55 to +150	$^{\circ}\text{C}$

- Note : 1. Mounted on a FR4 PCB, single-sided copper, mini pad.
2. Mounted on a 10cm*10cm*1mm copper pad area



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

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNITS
Breakdown voltage	V_{BR}	$I_R=0.5\text{mA}$ $T_J=25^\circ\text{C}$	100	-	-	V
Instantaneous forward voltage	V_F	$I_F=1\text{A}$ $T_J=25^\circ\text{C}$	-	0.36	-	V
		$I_F=5\text{A}$ $T_J=25^\circ\text{C}$	-	0.44	-	V
		$I_F=20\text{A}$	-	0.61	0.66	V
		$I_F=1\text{A}$ $T_J=125^\circ\text{C}$	-	0.23	-	V
Reverse current	I_R	$V_R=70\text{V}$ $T_J=25^\circ\text{C}$	-	25	-	μA
		$V_R=100\text{V}$ $T_J=25^\circ\text{C}$ $T_J=125^\circ\text{C}$	- -	- 20	80 -	μA mA

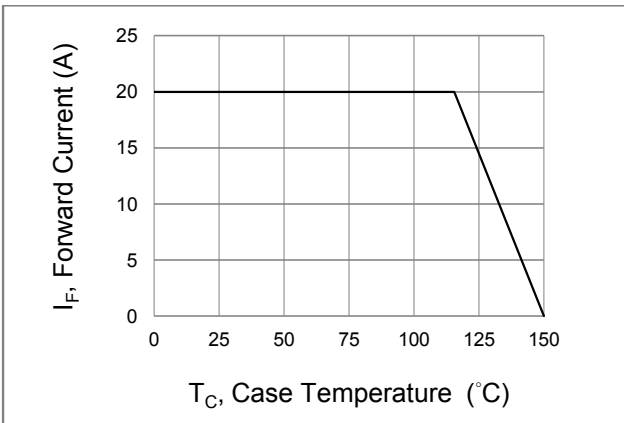


Fig.1 Forward Current Derating Curve

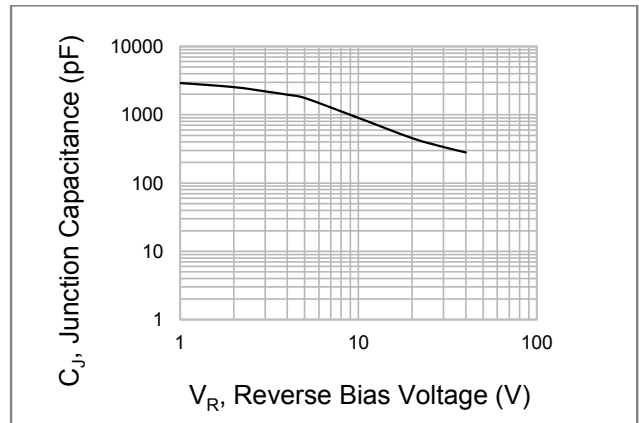


Fig.2 Typical Junction Capacitance

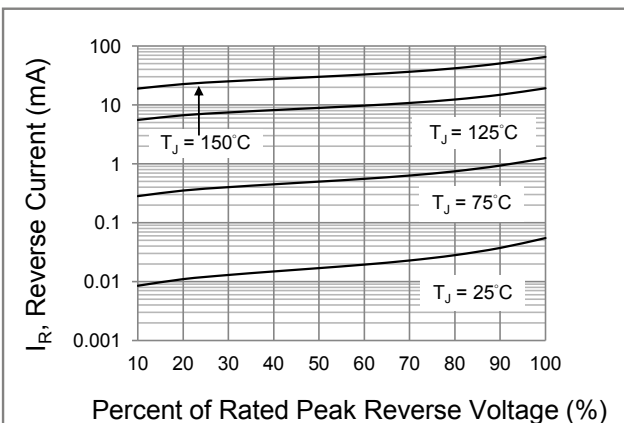


Fig.3 Typical Reverse Characteristics

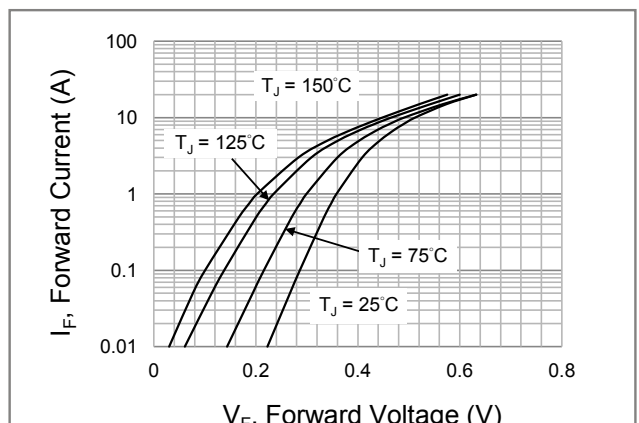


Fig.4 Typical Forward Characteristics

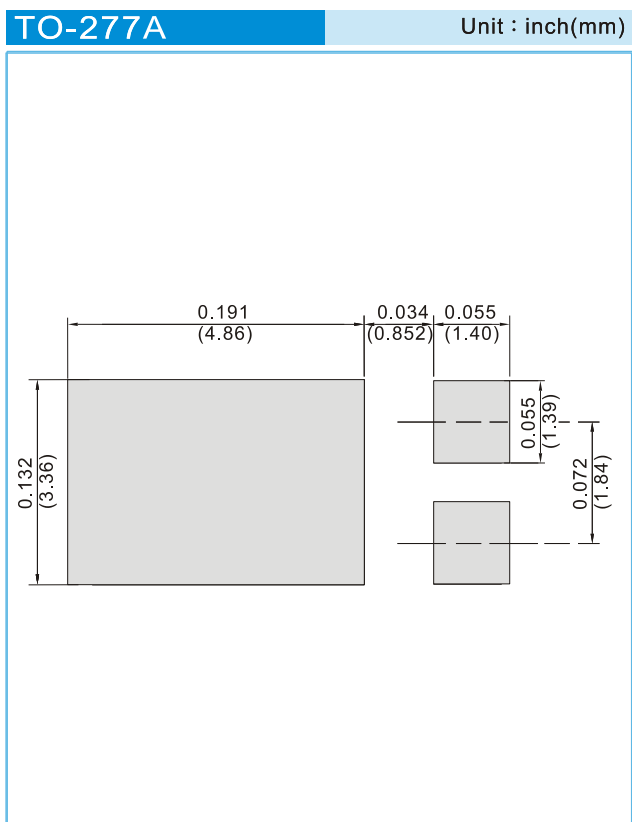


SVT20100UA

Part No Packing Code Version

Part No Packing Code	Package Type	Packing Type	Marking	Version
SVT20100UA_R2_00001	TO-277A	5K pcs / 13" reel	SVT20100U	Halogen free

Mounting Pad Layout





SVT20100UA

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