



# SVT2080UA

## EXTREME LOW VF SCHOTTKY BARRIER RECTIFIER

**Voltage**

**80 V**

**Current**

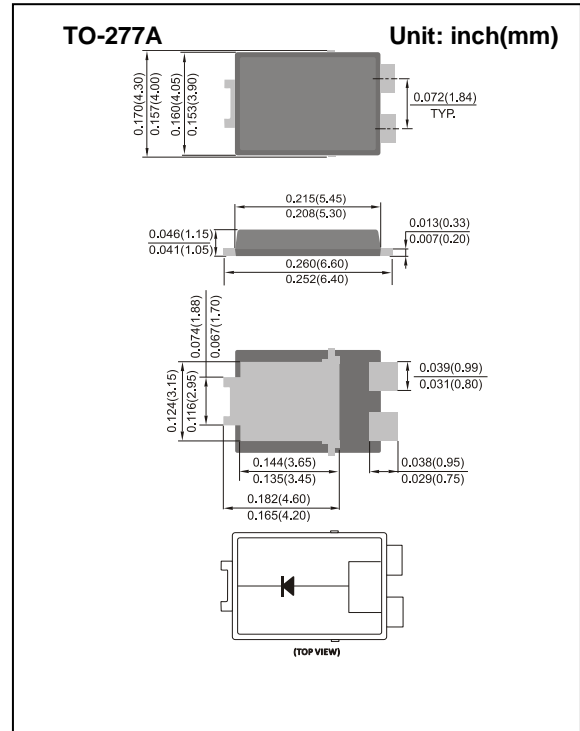
**20 A**

### 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<sub>A</sub>=25°C unless otherwise noted)

PARAMETER	SYMBOL	LIMIT	UNIT
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	80	V
Maximum rms voltage	V <sub>RMS</sub>	56	V
Maximum dc blocking voltage	V <sub>R</sub>	80	V
Maximum average forward rectified current	I <sub>F(AV)</sub>	20	A
Peak forward surge current : 8.3ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	300	A
Typical thermal resistance	(Note 1) R <sub>θJA</sub>	110	°C/W
	(Note 2) R <sub>θJC</sub>	5	
Operating junction temperature range	T <sub>J</sub>	-55 to +150	°C
Storage temperature range	T <sub>STG</sub>	-55 to +150	°C

Note : 1. Mounted on a FR4 PCB, single-sided copper, mini pad.

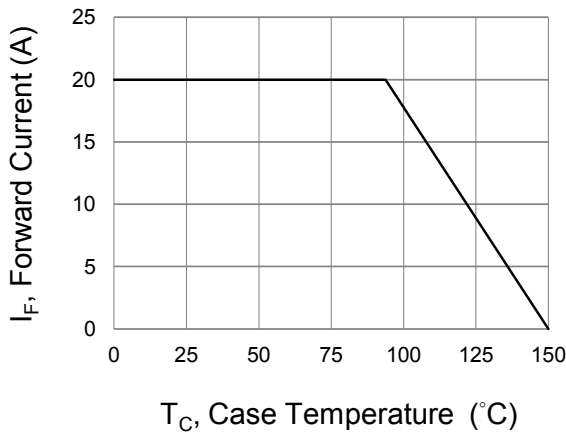
2. Mounted on a 10cm\*10cm\*1mm copper pad area



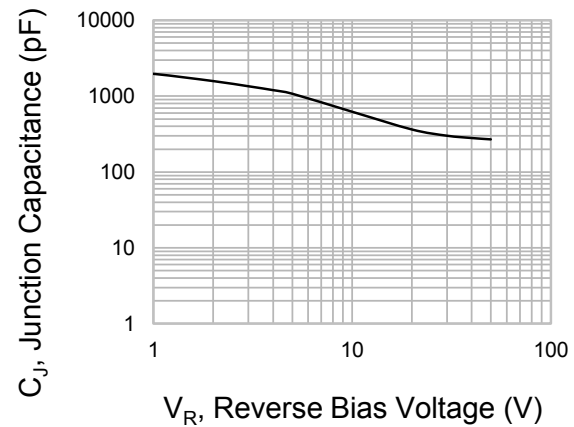
# SVT2080UA

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

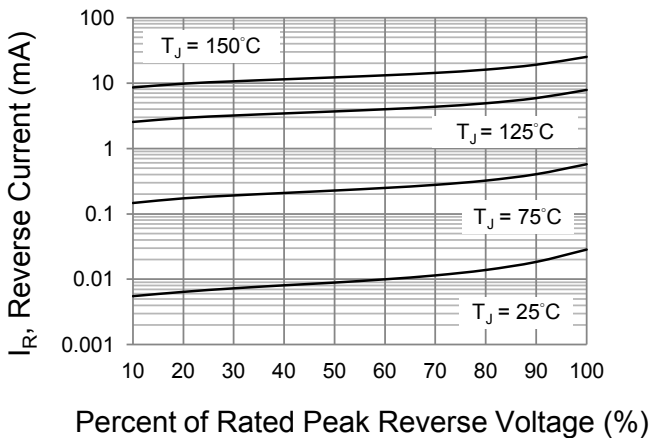
PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNITS
Breakdown voltage	$V_{BR}$	$I_R=0.5\text{mA}$ $T_J=25^\circ\text{C}$	80	-	-	V
Instantaneous forward voltage	$V_F$	$I_F=1\text{A}$ $T_J=25^\circ\text{C}$	-	0.35	-	V
		$I_F=5\text{A}$ $T_J=25^\circ\text{C}$	-	0.44	-	V
		$I_F=20\text{A}$ $T_J=25^\circ\text{C}$	-	-	0.66	V
		$I_F=1\text{A}$ $T_J=125^\circ\text{C}$	-	0.24	-	V
Reverse current	$I_R$	$V_R=64\text{V}$ $T_J=25^\circ\text{C}$	-	15	-	$\mu\text{A}$
		$V_R=80\text{V}$ $T_J=25^\circ\text{C}$ $T_J=125^\circ\text{C}$	-	-	150	$\mu\text{A}$ mA



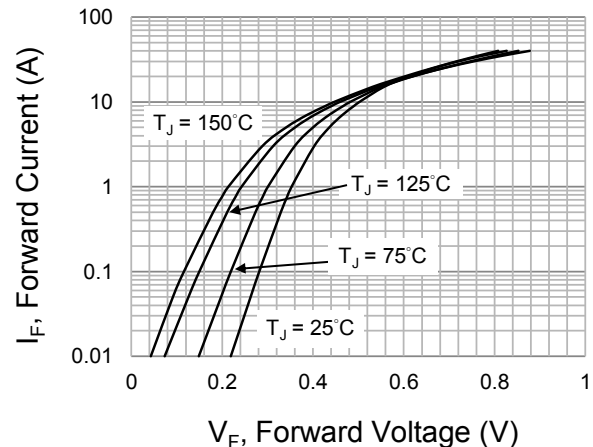
**Fig.1 Forward Current Derating Curve**



**Fig.2 Typical Junction Capacitance**



**Fig.3 Typical Reverse Characteristics**



**Fig.4 Typical Forward Characteristics**

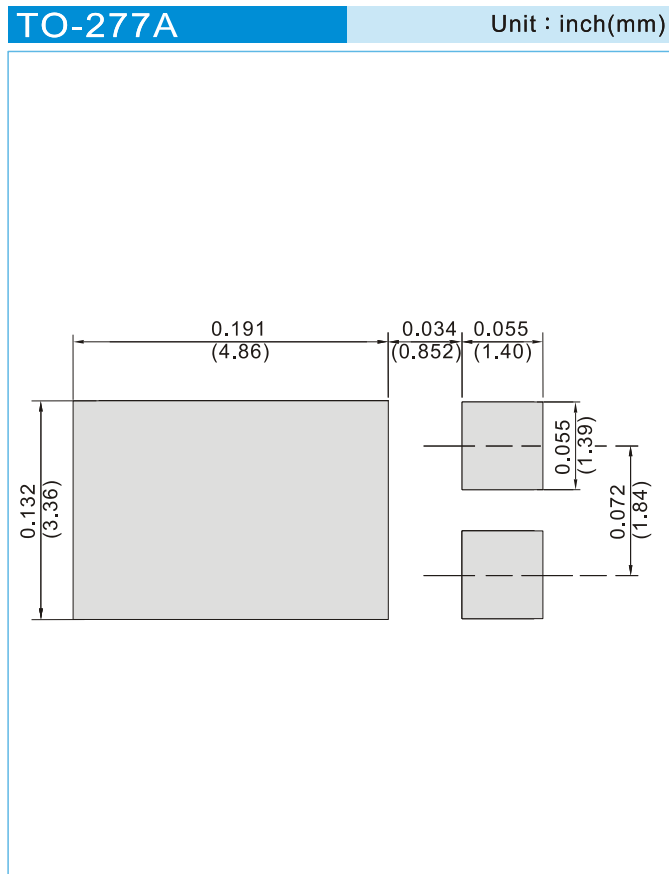


# SVT2080UA

## Part No Packing Code Version

Part No Packing Code	Package Type	Packing Type	Marking	Version
SVT2080UA_R2_00001	TO-277A	5K pcs / 13" reel	SVT2080U	Halogen free

## Mounting Pad Layout





## SVT2080UA

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