



# SS0530TB6

## SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

**VOLTAGE** 30 Volt **CURRENT** 0.5 Ampere

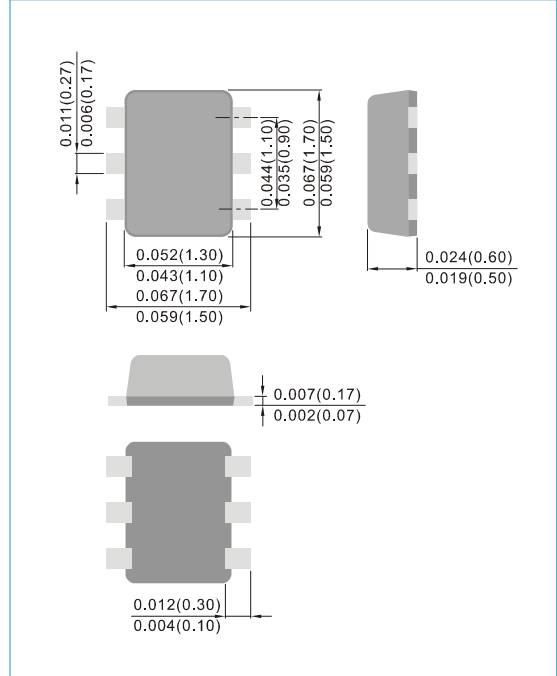
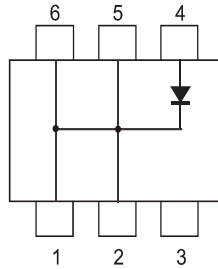
**SOT-563** Unit : inch(mm)

### FEATURES

- Low Switching noise
- High Frequency Rectification
- Low Leakage Current
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std. . (Halogen Free)

### MECHANICAL DATA

- Case: SOT-563, Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Apprx. Weight: 0.0001 ounces, 0.0026 grams
- Polarity: Color band denotes cathode end
- Marking: 3B



### ABSOLUTE MAXIMUM RATINGS (T<sub>A</sub>=25°C unless otherwise noted)

PARAMETER	SYMBOL	VALUE	UNITS
Reverse Voltage	V <sub>R</sub>	30	V
Peak Reverse Voltage	V <sub>RRM</sub>	30	V
Average Rectified Current	I <sub>O</sub>	0.5	A
Peak Forward Surge Current:8.3ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	6	A
Typical Thermal Resistance, Junction to Ambient (Note 1)	R <sub>θJA</sub>	625	°C/W
Operating Junction Temperature and Storage Temperature Range	T <sub>J</sub> ,T <sub>STG</sub>	-55 to +125	°C

### ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C unless otherwise noted)

PARAMETER	SYMBOL	Test Condition	MIN.	TYP.	MAX.	UNITS
Reverse Breakdown Voltage	V <sub>(BR)</sub>	I <sub>R</sub> =0.2mA	30	-	-	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =15 V	-	-	5	μA
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =0.5A	-	0.45	0.5	V
Typical Junction Capacitance	C <sub>J</sub>	V <sub>R</sub> =0V, f=1.0MHz	-	132	-	pF

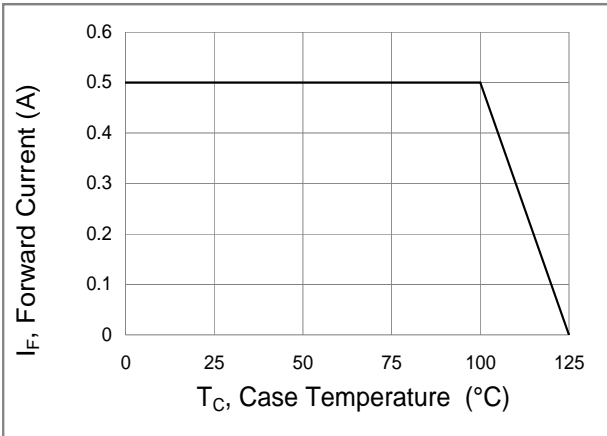
#### NOTES:

1. Mounted on 48cm<sup>2</sup> FR-4 PCB .

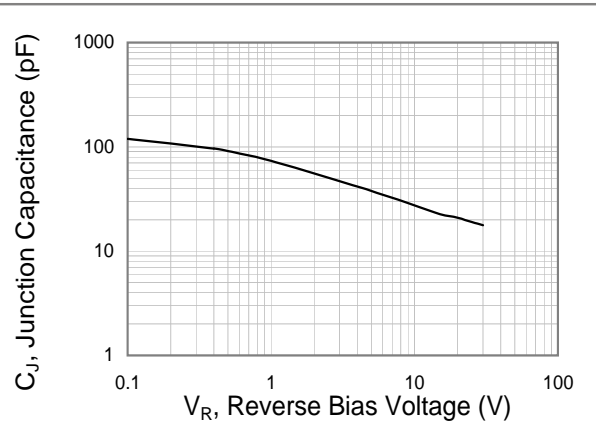


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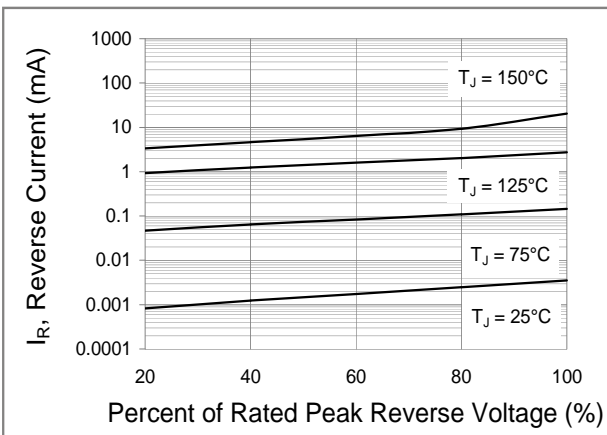
## RATING AND CHARACTERISTIC CURVES



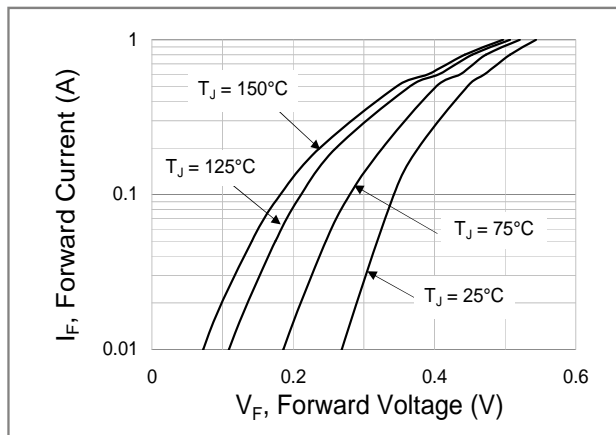
**Fig.1 Forward Current Derating Curve**



**Fig.2 Typical Junction Capacitance**



**Fig.3 Typical Reverse Characteristics**

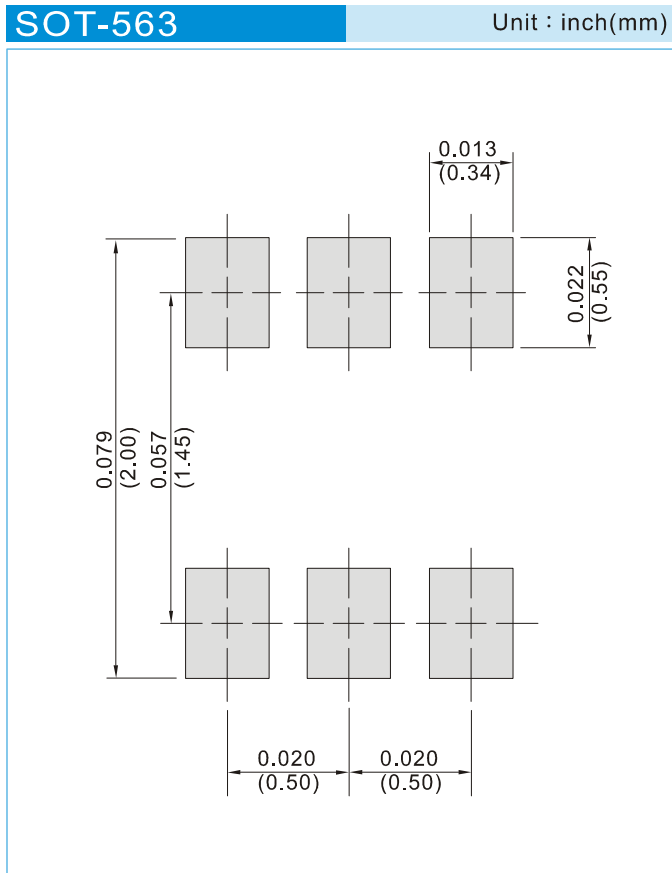


**Fig.4 Typical Forward Characteristics**



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## MOUNTING PAD LAYOUT



## ORDER INFORMATION

- Packing information
  - T/R - 10K per 13" plastic Reel
  - T/R - 4K per 7" plastic Reel



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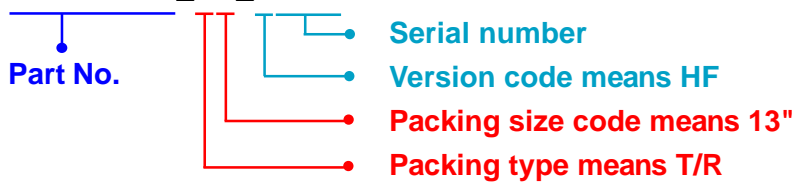
## Part No\_packing code\_Version

SS0530TB6\_R1\_00001

SS0530TB6\_R2\_00001

For example :

**RB500V-40\_R2\_00001**



Packing Code <b>XX</b>				Version Code <b>XXXXX</b>		
Packing type	1 <sup>st</sup> Code	Packing size code	2 <sup>nd</sup> Code	HF or RoHS	1 <sup>st</sup> Code	2 <sup>nd</sup> ~5 <sup>th</sup> 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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