



RB551V-30

SURFACE MOUNT SCHOTTKY DIODE

This device is an extremely fast Schottky diode housed in the ultra-small SOD-323 package.

FEATURES

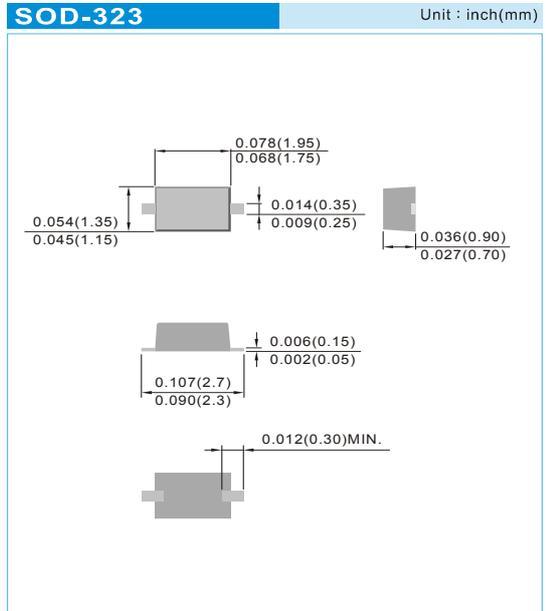
- Ultra low Vf
- Low capacitance for reduced insertion losses
- Reverse voltage rating of 30V
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

APPLICATIONS

- Mobile phones and accessories
- Hand-held computers
- High speed switching applications

MECHANICAL DATA

- Case: SOD-323, Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.0001 ounces, 0.004 grams
- Marking Code : 551



MAXIMUM RATINGS $T_J=25^{\circ}\text{C}$ unless otherwise noted

Rating	Symbol	Value	Units
Peak Reverse Voltage $I_R=500\mu\text{A}$	V_{RM}	30	V
Continuous Reverse Voltage	V_R	20	V
Average Rectified Forward Current	$I_{F(AV)}$	500	mA
Non-repetitive Peak Forward Current, 60Hz Half Sine-Wave	I_{FSM}	5	A
Total Power Dissipation (Note1)	P_{TOT}	200	mW
Operating Junction Temperature Range	T_J	-55 to + 125	$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	-55 to + 150	$^{\circ}\text{C}$

Note 1. FR-5 Board 1 x 0.75 x 0.062 in.

THERMAL CHARACTERISTICS

Characteristic	Symbol	Value	Units
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	500	$^{\circ}\text{C}/\text{W}$



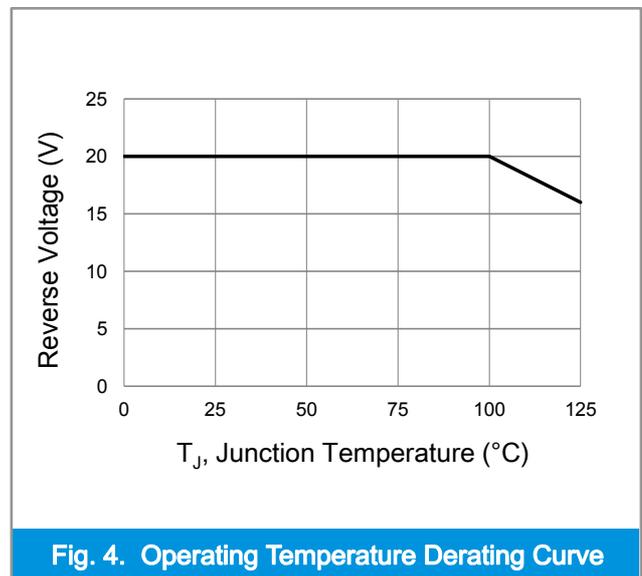
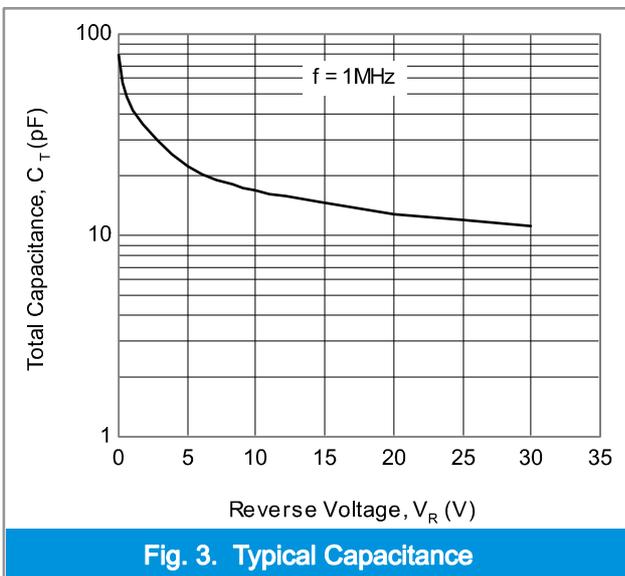
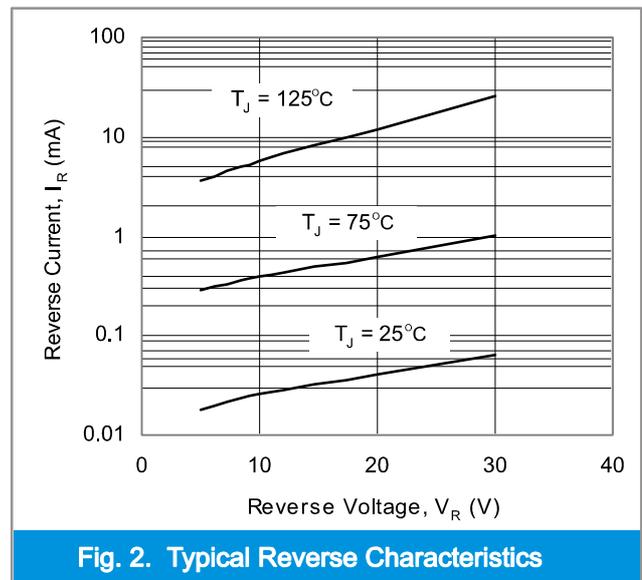
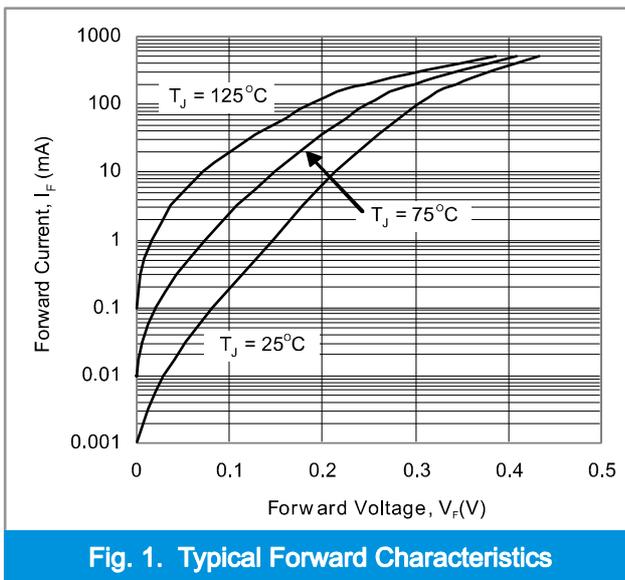
RB551V-30

ELECTRICAL CHARACTERISTICS $T_J=25^\circ\text{C}$ unless otherwise noted

Parameter	Symbol	Conditions	Min	Typ	Max	Units
Forward Voltage (Note 2)	V_F	$I_F=100\text{mA}$ $I_F=500\text{mA}$	-	-	0.36 0.47	V
Reverse Leakage Current	I_R	$V_R=20\text{V}$	-	-	100	μA
Total Capacitance	C_T	0Vdc Bias, $f = 1\text{MHz}$ 10Vdc Bias, $f = 1\text{MHz}$	-	-	85 20	pF

Note 2. Short duration pulse test to avoid self-heating effect

TYPICAL CHARACTERISTIC CURVES

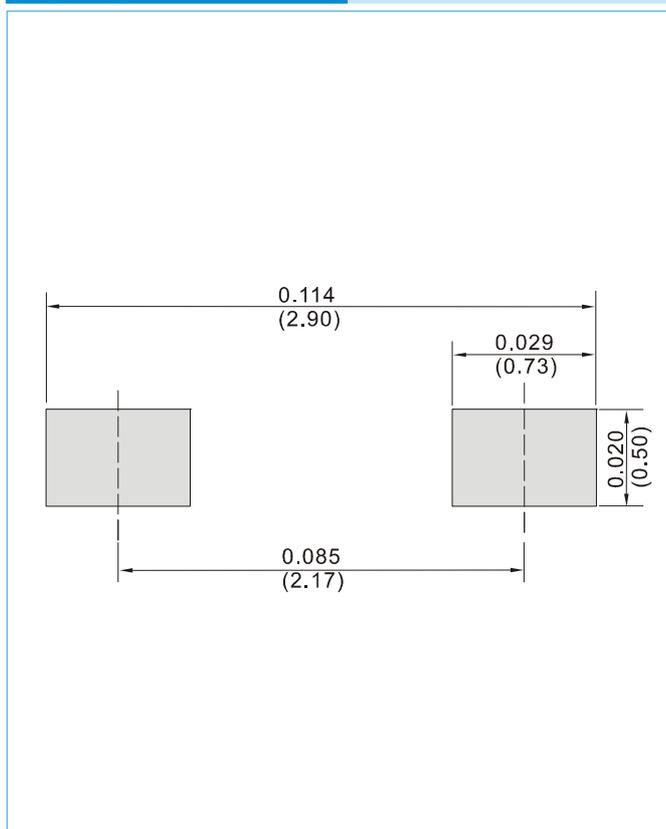




RB551V-30

MOUNTING PAD LAYOUT

SOD-323 Unit : inch(mm)



ORDER INFORMATION

- Packing information
T/R - 12K per 13" plastic Reel
T/R - 5K per 7" plastic Reel



RB551V-30

Part No_packing code_Version

RB551V-30_R1_00001

RB551V-30_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			



RB551V-30

Disclaimer

- Reproducing and modifying information of the document is prohibited without permission from Panjit International Inc..
- Panjit International Inc. reserves the rights to make changes of the content herein the document anytime without notification. Please refer to our website for the latest document.
- Panjit International Inc. disclaims any and all liability arising out of the application or use of any product including damages incidentally and consequentially occurred.
- Panjit International Inc. does not assume any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.
- Applications shown on the herein document are examples of standard use and operation. Customers are responsible in comprehending the suitable use in particular applications. Panjit International Inc. makes no representation or warranty that such applications will be suitable for the specified use without further testing or modification.
- The products shown herein are not designed and authorized for equipments requiring high level of reliability or relating to human life and for any applications concerning life-saving or life-sustaining, such as medical instruments, transportation equipment, aerospace machinery et cetera. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Panjit International Inc. for any damages resulting from such improper use or sale.
- Since Panjit uses lot number as the tracking base, please provide the lot number for tracking when complaining.