

## Small Signal Product

### Surface Mount Schottky

#### FEATURES

- Designed for mounting on small surface
- Extremely thin / leadless package
- Low capacitance
- Low forward voltage drop
- Packing code with suffix "G" means green compound (halogen-free)


**1005**


#### MECHANICAL DATA

- Case: 1005
- Terminal: Gold plated, solderable per MIL-STD-750, method 2026
- Polarity: Indicated by cathode band
- Weight: 6 mg (approximately)
- Marking code: BF

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T <sub>A</sub> =25°C unless otherwise noted)			
PARAMETER	SYMBOL	VALUE	UNIT
Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	30	V
Reverse Voltage	V <sub>R</sub>	30	V
RMS Reverse Voltage	V <sub>R(RMS)</sub>	21	V
Average Forward Current	I <sub>O</sub>	200	mA
Repetitive Peak Forward Current	I <sub>FRM</sub>	0.3	A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rate Load	I <sub>FSM</sub>	600	mA
Power Dissipation	P <sub>d</sub>	200	mW
Forward Voltage I <sub>F</sub> = 0.1 mA I <sub>F</sub> = 1 mA I <sub>F</sub> = 10 mA I <sub>F</sub> = 30 mA I <sub>F</sub> = 100 mA	V <sub>F</sub>	0.24	V
		0.32	
		0.40	
		0.50	
		1.00	
Reverse Leakage Current V <sub>R</sub> = 25 V	I <sub>R</sub>	2	μA
Typical Capacitance Between Terminals V <sub>R</sub> = 1 V, f = 1.0 MHz Reverse Voltage	C <sub>J</sub>	10	pF
Reverse Recovery Time ( I <sub>F</sub> = I <sub>R</sub> = 10mA, I <sub>RR</sub> = 0.1×I <sub>R</sub> , R <sub>L</sub> =100Ω )	t <sub>rr</sub>	5	ns
Junction Temperature	T <sub>J</sub>	-65 to +125	°C
Storage Temperature	T <sub>STG</sub>	-65 to +125	°C

## Small Signal Product

### RATINGS AND CHARACTERISTICS CURVES

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

Fig.1 Forward Characteristics

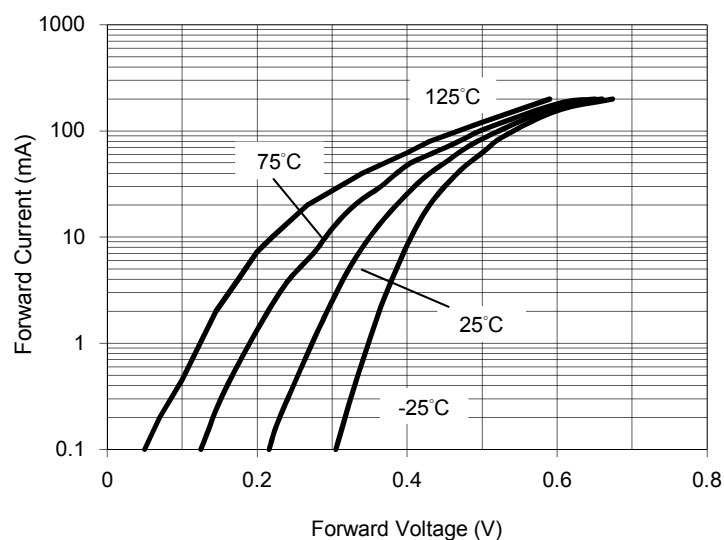


Fig. 2 Reverse Characteristics

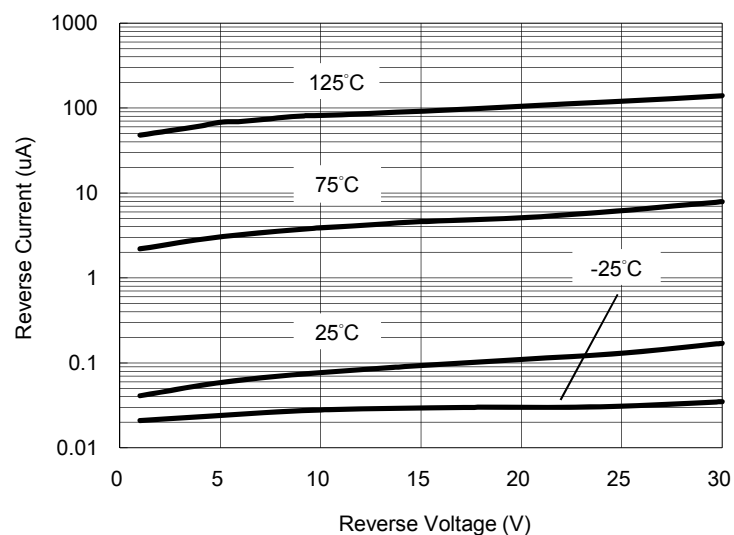


Fig. 3 Capacitance Between Terminals Characteristics

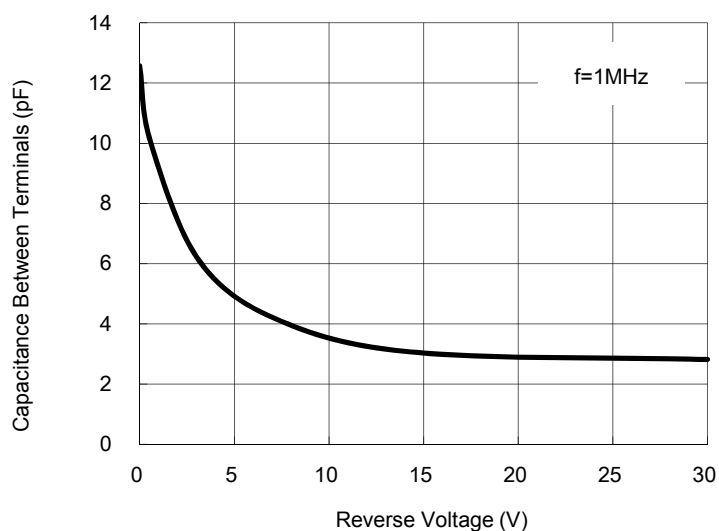
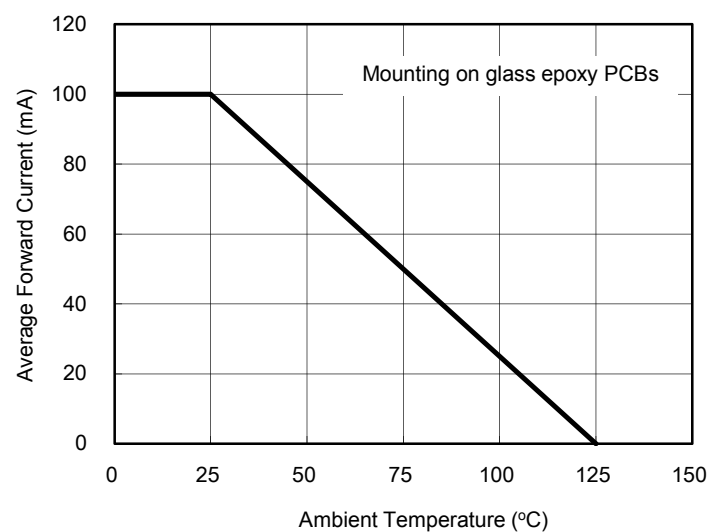


Fig. 4 Current Derating Curve



Small Signal Product

ORDERING INFORMATION

PART NO.	PART NO. SUFFIX	PACKING CODE	PACKING CODE SUFFIX	PACKAGE	PACKING
TSS54L	-xx (Note 1)	RW	G	1005	4K / 7" Reel

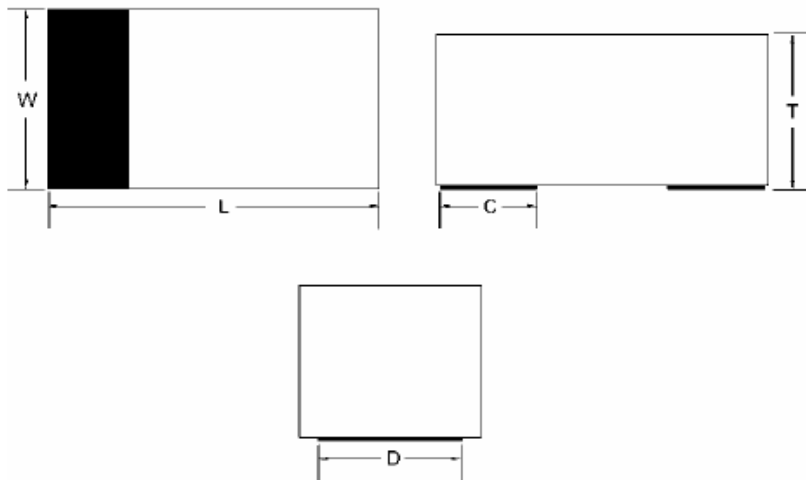
Note 1: Part No. Suffix „-xx “ would be used for special requirement

EXAMPLE

PREFERRED PART NO.	PART NO.	PART NO. SUFFIX	PACKING CODE	PACKING CODE SUFFIX	DESCRIPTION
TSS54L RWG	TSS54L		RW	G	Multiple manufacture source Green compound
TSS54L-F0 RWG	TSS54L	-F0	RW	G	Define manufacture source Green compound

PACKAGE OUTLINE DIMENSION

**1005**



DIM.	Unit (mm)			Unit (inch)		
	Min	Typ	Max	Min	Typ	Max
L	2.40	-	2.60	0.094	-	0.102
W	1.10	-	1.30	0.043	-	0.051
T	0.70	-	0.90	0.028	-	0.035
C	-	0.50	-	-	0.020	-
D	-	1.00	-	-	0.039	-

### Notice

Specifications of the products displayed herein are subject to change without notice. TSC or anyone on its behalf, assumes no responsibility or liability for any errors or inaccuracies.

Information contained herein is intended to provide a product description only. No license, express or implied, to any intellectual property rights is granted by this document. Except as provided in TSC's terms and conditions of sale for such products, TSC assumes no liability whatsoever, and disclaims any express or implied warranty, relating to sale and/or use of TSC products including liability or warranties relating to fitness for a particular purpose, merchantability, or infringement of any patent, copyright, or other intellectual property right.

The products shown herein are not designed for use in medical, life-saving, or life-sustaining applications. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify TSC for any damages resulting from such improper use or sale.