

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

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RATINGS AND CHARACTERISTICS CURVES

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

Fig.1 Forward Characteristics

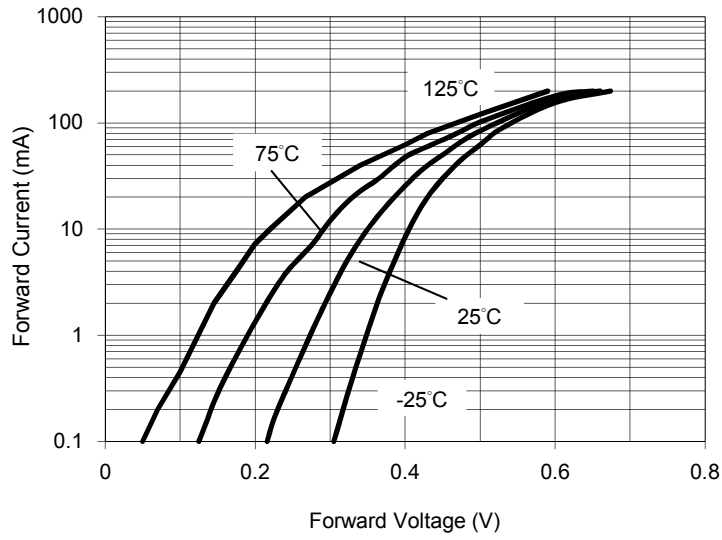


Fig. 2 Reverse Characteristics

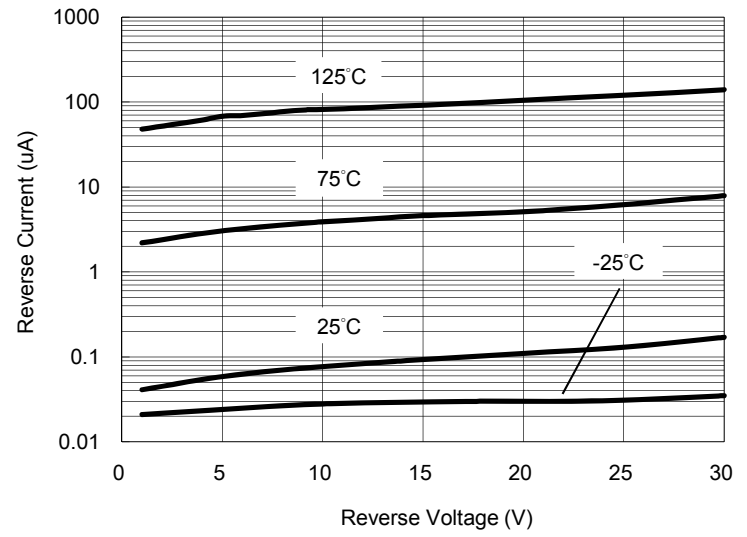


Fig. 3 Capacitance Between Terminals Characteristics

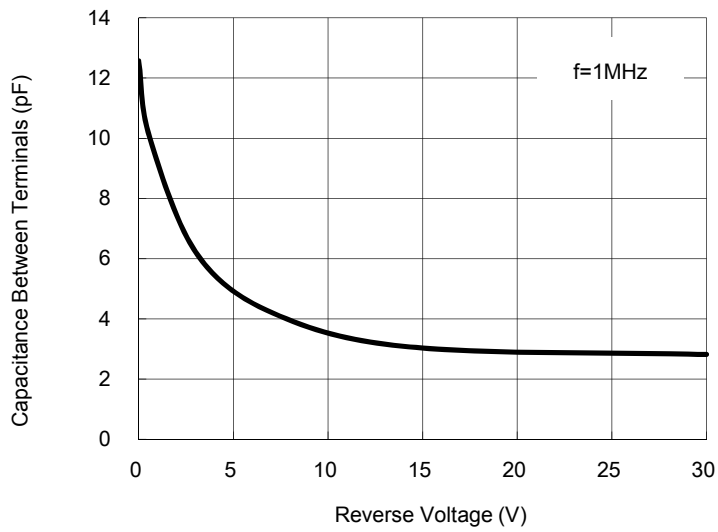
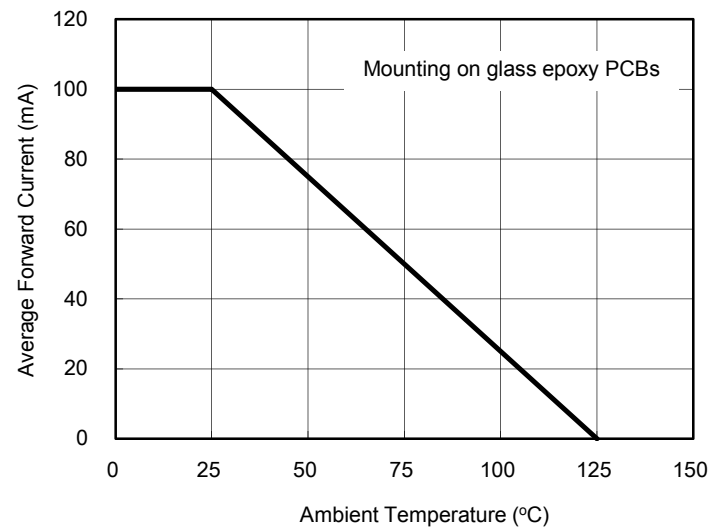


Fig. 4 Current Derating Curve



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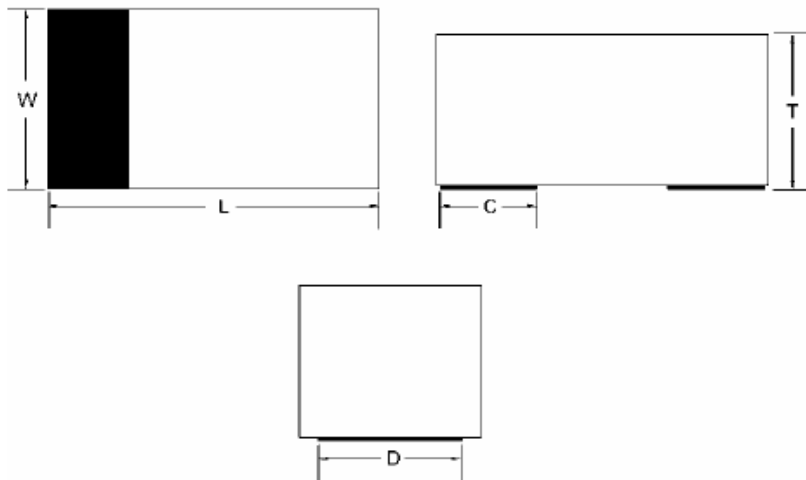
ORDERING INFORMATION					
PART NO.	PART NO. SUFFIX	PACKING CODE	PACKING CODE SUFFIX	PACKAGE	PACKING
TSS54L	-xx (Note 1)	RW	G	1005	4K / 7" Reel

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	-

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