

Small Signal Product

Surface Mount Schottky Barrier

FEATURES

- Designed for mounting on small surface
- Extremely thin/leadless package
- Low capacitance
- Low forward voltage drop
- Compliant to RoHS Directive 2011/65/EU and in accordance to WEEE 2002/96/EC
- Halogen-free according to IEC 61249-2-21


0603


MECHANICAL DATA

- Case: 0603
- Terminal: Gold plated, solderable per MIL-STD-750, method 2026
- Polarity: Indicated by cathode band
- Weight: 3 mg (approximately)
- Marking code: BF



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS ($T_A=25^{\circ}\text{C}$ unless otherwise noted)			
PARAMETER	SYMBOL	VALUE	UNIT
Repetitive Peak Reverse Voltage	V_{RRM}	30	V
DC Reverse Voltage	V_R	30	V
RMS Reverse Voltage	$V_{R(RMS)}$	21	V
Average Forward Current	I_O	200	mA
Repetitive Peak Forward Current	I_{FRM}	300	mA
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rate Load	I_{FSM}	600	mA
Power Dissipation	P_d	150	mW
Forward Voltage	V_F	$I_F = 0.1 \text{ mA}$	0.24
		$I_F = 1 \text{ mA}$	0.32
		$I_F = 10 \text{ mA}$	0.40
		$I_F = 30 \text{ mA}$	0.50
		$I_F = 100 \text{ mA}$	1.00
Reverse Leakage Current	I_R	2	μA
Typical Capacitance Between Terminals $V_R = 1 \text{ V}$, $f = 1.0 \text{ MHz}$ Reverse Voltage	C_J	10	pF
Reverse Recovery Time ($I_F = I_R = 10 \text{ mA}$, $I_{RR} = 0.1 \times I_R$, $R_L = 100 \Omega$)	t_{rr}	5	ns
Junction Temperature	T_J	-65 to +125	$^{\circ}\text{C}$
Storage Temperature	T_{STG}	-65 to +125	$^{\circ}\text{C}$

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RATINGS AND CHARACTERISTICS CURVES

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

Fig.1 Forward Characteristics

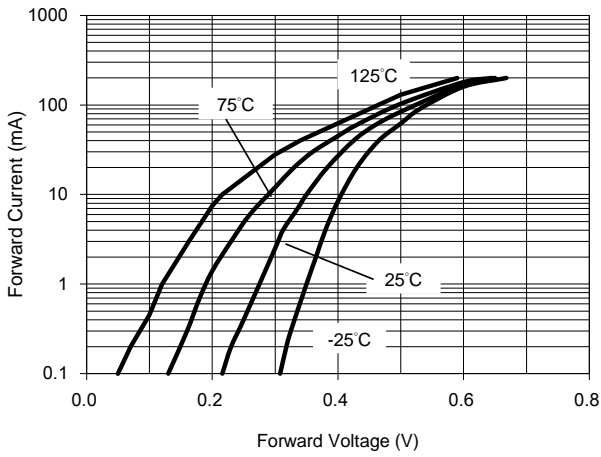


Fig. 2 Reverse Characteristics

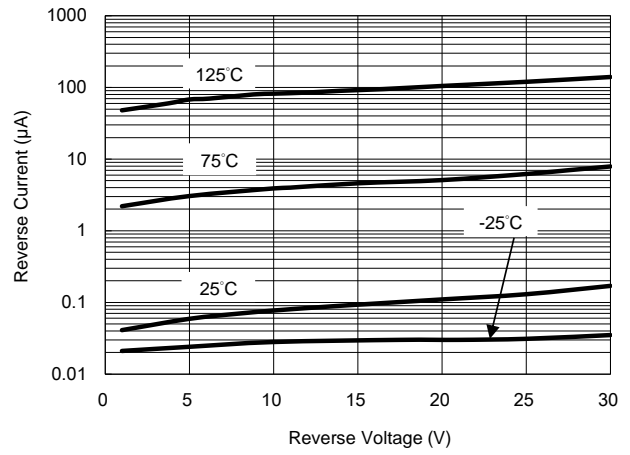


Fig. 3 Capacitance Between Terminals Characteristics

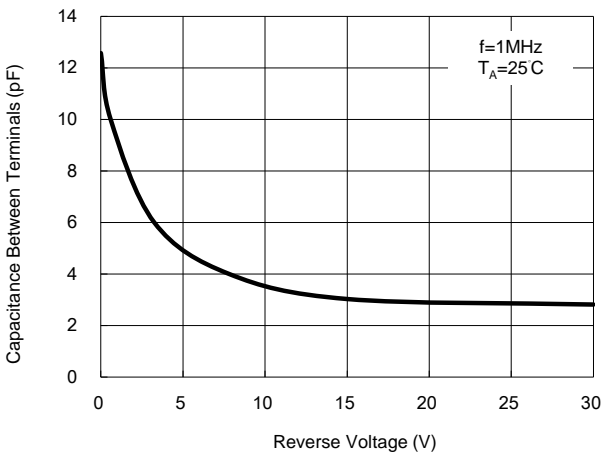
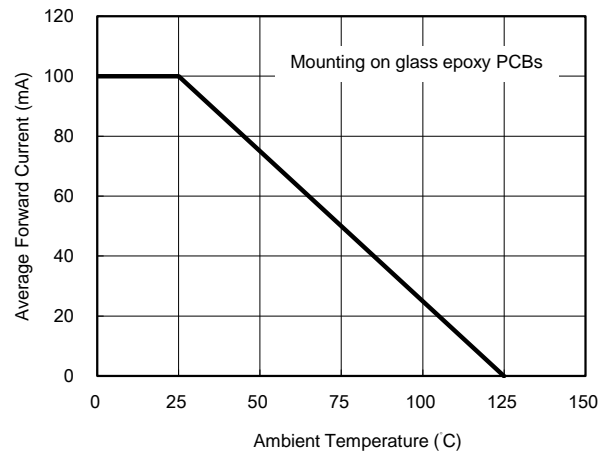


Fig. 4 Current Derating Curve



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ORDERING INFORMATION

PART NO.	PACKING CODE	PACKING CODE SUFFIX	PACKAGE	PACKING
TSS54U	RG	G	0603	4K / 7" Reel

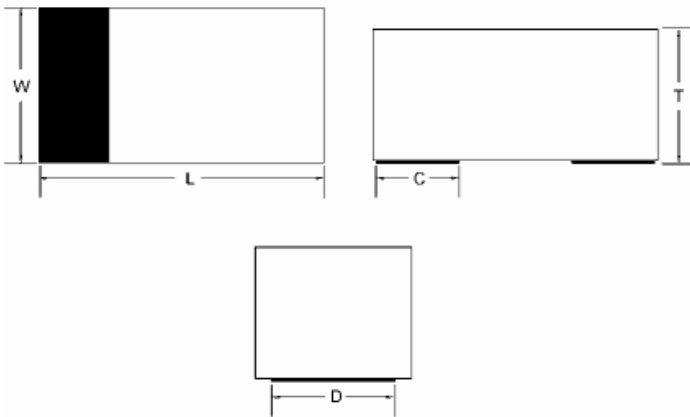
Note: Whole series with green compound

EXAMPLE

EXAMPLE PART NO.	PART NO.	PACKING CODE	PACKING CODE SUFFIX	DESCRIPTION
TSS54U RGG	TSS54U	RG	G	Green compound

PACKAGE OUTLINE DIMENSION

0603



DIM.	Unit (mm)			Unit (inch)		
	Min	Typ.	Max	Min	Typ.	Max
L	1.60	-	1.80	0.063	-	0.071
W	0.80	-	1.00	0.031	-	0.039
T	0.70	-	0.85	0.028	-	0.033
C	-	0.45	-	-	0.018	-
D	-	0.70	-	-	0.028	-

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