

Small Signal Product

## Surface Mount Schottky Barrier

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)



**0603**



MECHANICAL DATA

- Case: 0603
- Molding compound, UL flammability classification rating 94V-0
- Terminal: Gold plated, solderable per MIL-STD-750, method 2026
- Polarity : Indicated by cathode band
- Weight : 0.003 g (approximately)
- Marking code: BB

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>	35	V
DC Reverse Voltage	V <sub>R</sub>	30	V
Average Forward Current	I <sub>O</sub>	200	mA
Peak Forward Surge Current 8.3 ms Single Half Sine-Wave Superimposed on Rate Load	I <sub>FSM</sub>	1.0	A
Power Dissipation	P <sub>d</sub>	150	mW
Forward Voltage @ I <sub>F</sub> =200mA	V <sub>F</sub>	0.6	V
Reverse Leakage Current V <sub>R</sub> =10V	I <sub>R</sub>	1.0	μA
Typical Capacitance Between Terminals V <sub>R</sub> =1V, f =1.0MHz Reverse Voltage	C <sub>J</sub>	1.5	pF
Junction Temperature	T <sub>J</sub>	-40 to +125	°C
Storage Temperature	T <sub>STG</sub>	-40 to +125	°C

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RATINGS AND CHARACTERISTICS CURVES

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

Fig.1 Forward characteristics

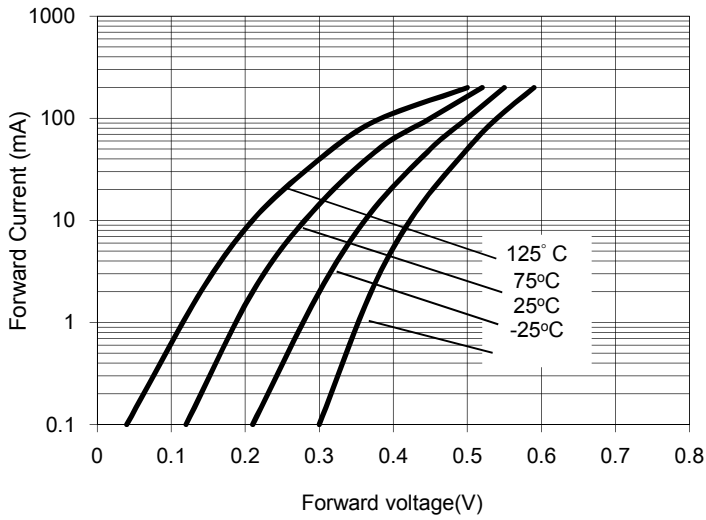


Fig. 2 Reverse Characteristics

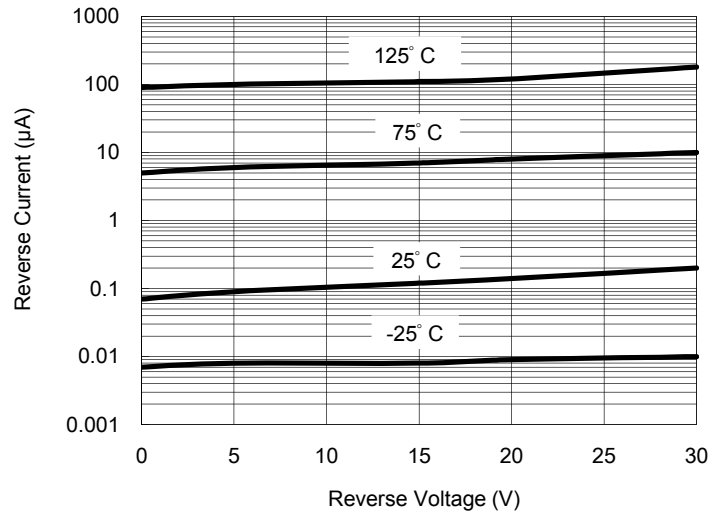


Fig. 3 Capacitance Between Terminals Characteristics

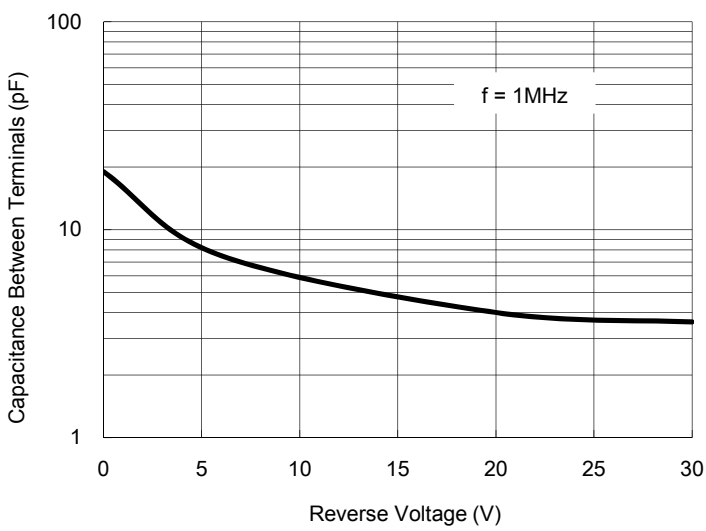


Fig. 4 Current Derating Curve

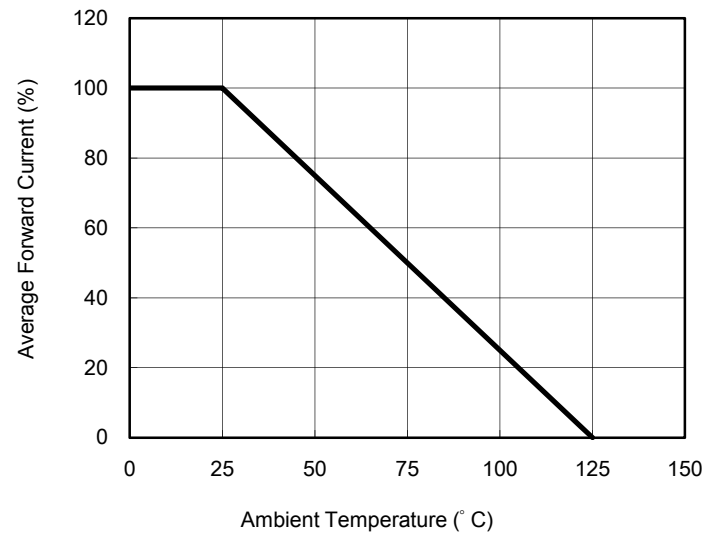


Fig. 5 VF Dispersion

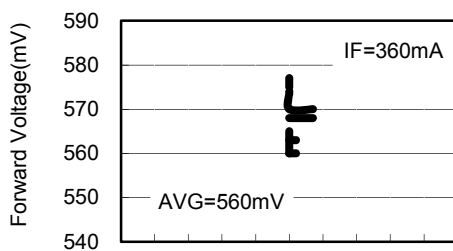


Fig. 6 IR Dispersion Map

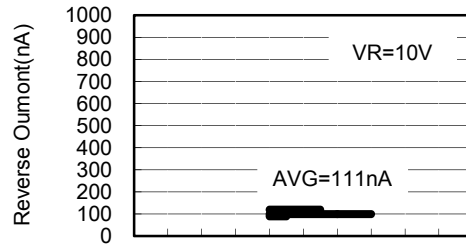
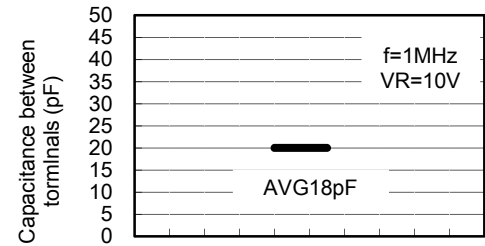


Fig. 7 CT Dispersion Map



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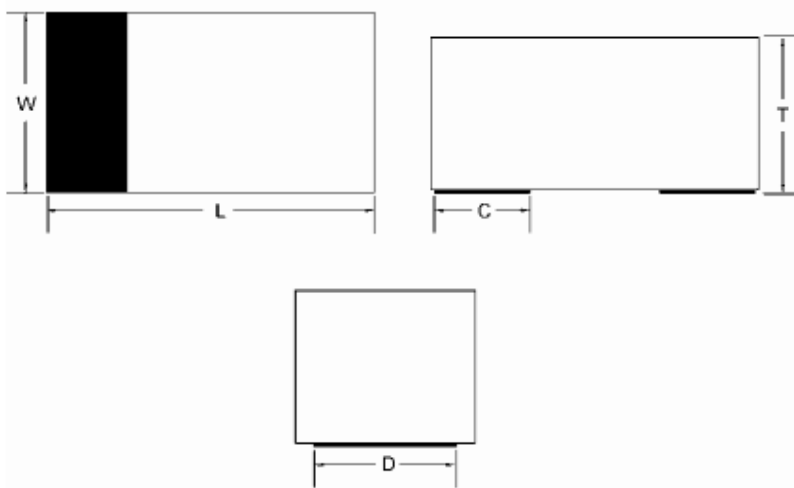
ORDERING INFORMATION					
PART NO.	PART NO. SUFFIX (Note 1)	PACKING CODE	PACKING CODE SUFFIX	PACKAGE	PACKING
TSS0230U	-xx	RZ	G	0603	5K / 7" Reel

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

EXAMPLE					
PREFERRED P/N	PART NO.	PART NO. SUFFIX	PACKING CODE	PACKING CODE SUFFIX	DESCRIPTION
TSS0230U RZG	TSS0230U		RZ	G	Multiple manufacture source Green compound
TSS0230U-F0 RZG	TSS0230U	-F0	RZ	G	Define manufacture source 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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