

# 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
- Terminal: Gold plated, solderable per MIL-STD-750, method 2026
- Polarity : Indicated by cathode band
- Weight : 0.003 g (approximately)
- Marking code: BG

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>	70	V		
DC Reverse Voltage	V <sub>R</sub>	70	V		
RMS Reverse Voltage	V <sub>R(RMS)</sub>	49	V		
Average Forward Current	Ι <sub>Ο</sub>	70	mA		
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rate Load	I <sub>FSM</sub>	100	mA		
Power Dissipation	Pd	150	mW		
Forward Voltage I <sub>F</sub> = 1 mA	V	0.41	V		
I <sub>F</sub> = 15 mA	۷F	1.0			
Reverse Leakage Current $V_R = 25 V$	I <sub>R</sub>	0.1	μA		
Typical Capacitance Between Terminals V <sub>R</sub> = 0 V , f = 1.0 MHz Reverse Voltage	CJ	2	pF		
Reverse Recovery Time	+	5	ns		
$(I_{F}=I_{R}=10mA, I_{RR}=0.1 \times I_{R}, R_{L}=100\Omega)$	۲r				
Junction Temperature	TJ	-65 to +125	°C		
Storage Temperature	T <sub>STG</sub>	-65 to +125	°C		



### **RATINGS AND CHARACTERISTICS CURVES**

(T<sub>A</sub>=25°C unless otherwise noted)







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	
TSS70U	-xx (Note 1)	RZ	G	0603	5K / 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	
TSS70U RZG	TSS70U		RZ	G	Multiple manufacture source Green compound	
TSS70U-F0 RZG	TSS70U	-F0	RZ	G	Defined manufacture source Green compound	

### PACKAGE OUTLINE DIMENSION

0603



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



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