

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: TSS42L: BD  
TSS43L: BE

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>	0.5	A	
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rate Load	I <sub>FSM</sub>	400	mA	
Power Dissipation	P <sub>d</sub>	200	mW	
Forward Voltage	TSS42L/43L I <sub>F</sub> = 200 mA TSS42L I <sub>F</sub> = 10 mA TSS42L I <sub>F</sub> = 50 mA TSS43L I <sub>F</sub> = 2 mA TSS43L I <sub>F</sub> = 15 mA	V <sub>F</sub>	1.00	V
			0.40	
			0.65	
			0.33	
			0.45	
Reverse Leakage Current	V <sub>R</sub> = 25 V I <sub>R</sub>	0.5	μA	
Typical Capacitance Between Terminals (V <sub>R</sub> =1V, f=1.0MHz)	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>	-55 to + 125	°C	
Storage Temperature	T <sub>STG</sub>	-55 to + 125	°C	

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RATINGS AND CHARACTERISTICS CURVES

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

Fig.1 Forward Characteristics

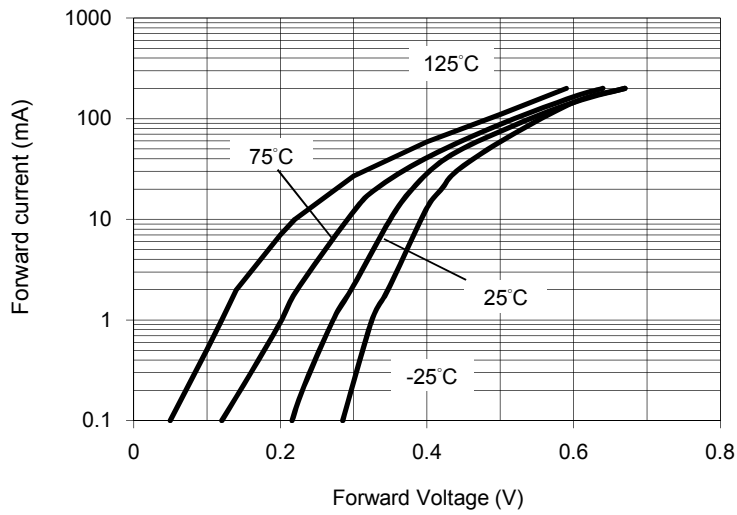


Fig. 2 Reverse Characteristics

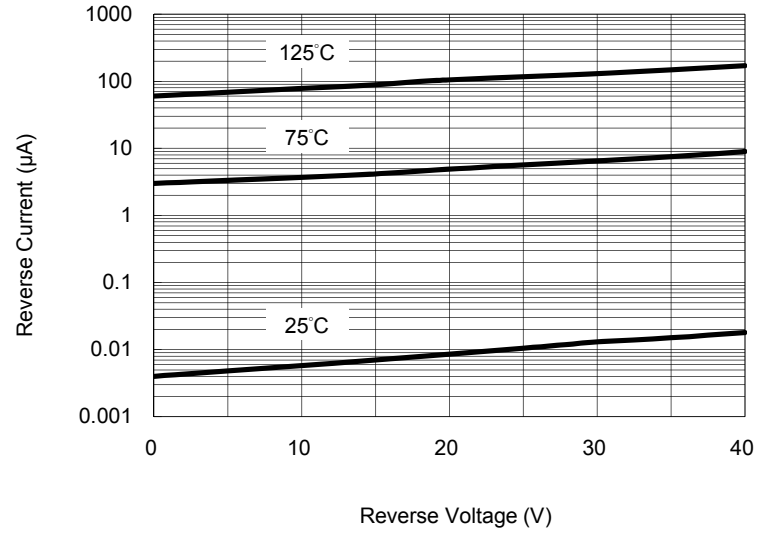


Fig. 3 Capacitance Between Terminals Characteristics

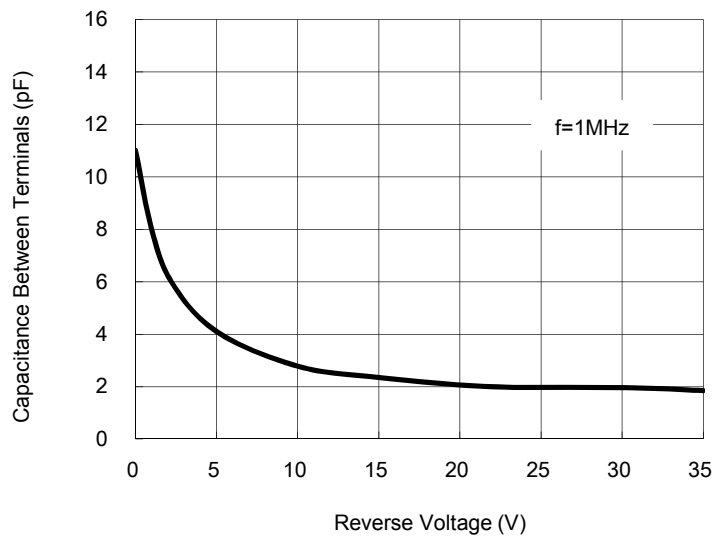
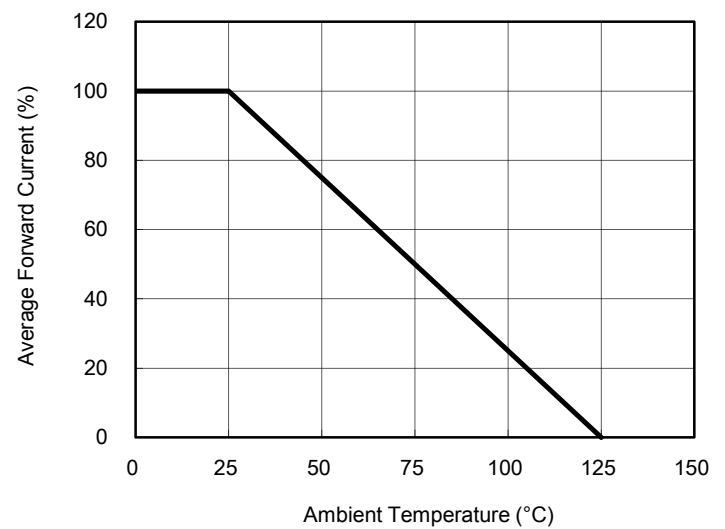


Fig. 4 Current Derating Curve



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ORDERING INFORMATION					
PART NO.	PART NO. SUFFIX (Note 2)	PACKING CODE	PACKING CODE SUFFIX	PACKAGE	PACKING
TSS4xL (Note 1)	-xx	RW	G	1005	4K / 7" Reel

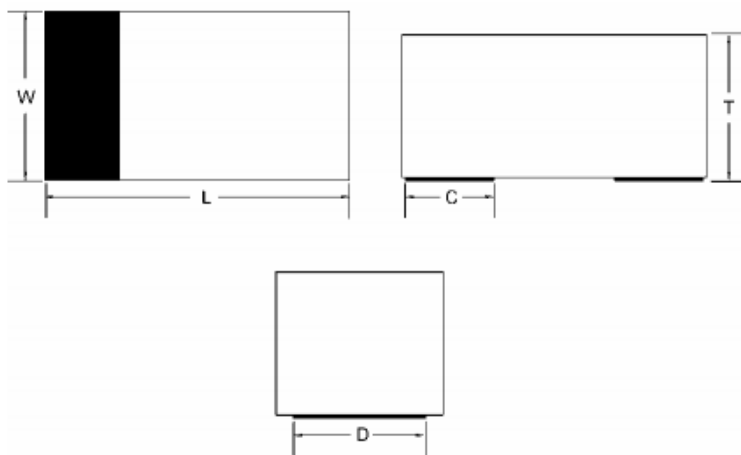
Note 1: "x" is Device Code from "2" thru "3".

Note 2: 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
TSS42L RWG	TSS42L		RW	G	Multiple manufacture source Green compound
TSS42L-F0 RWG	TSS42L	-F0	RW	G	Define manufacture source Green compound

PACKAGE OUTLINE DIMENSION

**1005**



DIM.	Unit (mm)			Unit (inch)		
	Min	Typ	Max	Min	Typ	Max
L	2.4	-	2.6	0.094	-	0.102
W	1.1	-	1.3	0.043	-	0.051
T	0.7	-	0.9	0.028	-	0.035
C	-	0.5	-	-	0.020	-
D	-	1.0	-	-	0.039	-

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