

# **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)







#### 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 A	AND ELECTR	ICAL CHAR	ACTERISTICS	S (T <sub>A</sub> =25°C unless otherwise noted)	
PARAMETER			SYMBOL	VALUE	UNIT
Repetitive Peak Reverse Volt	age		$V_{RRM}$	30	V
Reverse Voltage			V <sub>R</sub>	30	V
RMS Reverse Voltage			$V_{R(RMS)}$	21	V
Average Forward Current			I <sub>O</sub>	200	mA
Repetitive Peak Forward Cur	rent		I <sub>FRM</sub>	0.5	А
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rate Load			I <sub>FSM</sub>	400	mA
Power Dissipation			Pd	200	mW
Forward Voltage	TSS42L/43L	I <sub>F</sub> = 200 mA		1.00	
	TSS42L	$I_F = 10 \text{ mA}$		0.40	
	TSS42L	$I_F = 50 \text{ mA}$	V <sub>F</sub>	0.65	V
	TSS43L	$I_F = 2 \text{ mA}$		0.33	
	TSS43L	$I_F = 15 \text{ mA}$		0.45	
Reverse Leakage Current	$V_{R} = 25 \text{ V}$		I <sub>R</sub>	0.5	μA
Typical Capacitance Between Terminals ( $V_R$ =1 $V$ , f=1.0MHz )			CJ	10	pF
Reverse Recovery Time ( $I_F=I_R=10\text{mA}$ , $Irr=0.1\times I_R$ , $R_L=100\Omega$ )			t <sub>rr</sub>	5	ns
Junction Temperature			TJ	-55 to + 125	°C
Storage Temperature			T <sub>STG</sub>	-55 to + 125	°C



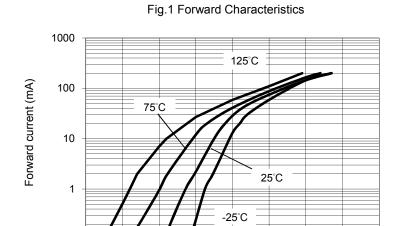
#### RATINGS AND CHARACTERISTICS CURVES

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

0.1

0

0.2



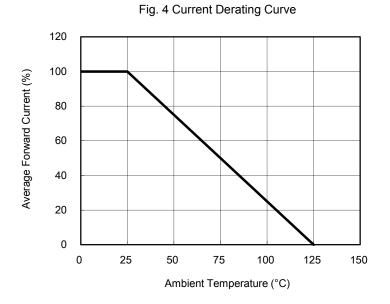
0.4 Forward Voltage (V) 0.6

0.8

Fig. 2 Reverse Characteristics

1000
100
100
75°C
100
0.01
0.001
Reverse Voltage (V)

Fig. 3 Capacitance Between Terminals Characteristics 16 14 Capacitance Between Terminals (pF) 12 f=1MHz 10 8 6 4 2 0 0 5 10 25 30 35 15 20 Reverse Voltage (V)







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

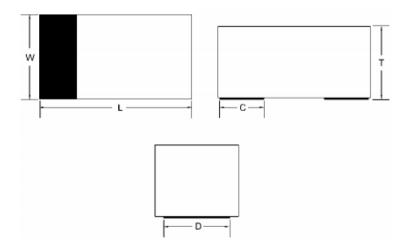
Note 1: "x" is Device Code from "2" thru "3".

Note 2: Part No. Suffix "-xx " would be used for special requirement

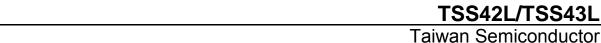
EXAMPLE						
PREFERRED	PART NO.	PART NO.	PACKING CODE	PACKING CODE	DESCRIPTION	
PART NO.		SUFFIX		SUFFIX		
TSS42L RWG	TSS42L		RW	G	Multiple manufacture source Green compound	
TSS42L-F0 RWG	TSS42L	-F0	RW	G	Define manufacture source Green compound	

## PACKAGE OUTLINE DIMENSION

#### 1005



DIM.	Unit (mm)			Unit (inch)		
DIIVI.	Min	Тур	Max	Min	Тур	Max
L	2.4	-	2.6	0.094	-	0.102
W	1.1	-	1.3	0.043	1	0.051
Т	0.7	-	0.9	0.028	-	0.035
С	-	0.5	-	_	0.020	-
D	-	1.0	-	_	0.039	-



#### Notice

Specifications of the products displayed herein are subject to change without notice. TSC or anyone on its behalf, assumes no responsibility or liability for any errors or inaccuracies.

Information contained herein is intended to provide a product description only. No license, express or implied,to any intellectual property rights is granted by this document. Except as provided in TSC's terms and conditions of sale for such products, TSC assumes no liability whatsoever, and disclaims any express or implied warranty, relating to sale and/or use of TSC products including liability or warranties relating to fitness for a particular purpose, merchantability, or infringement of any patent, copyright, or other intellectual property right.

The products shown herein are not designed for use in medical, life-saving, or life-sustaining applications. Customers using or seling these products for use in such applications do so at their own risk and agree to fully indemnify TSC for any damages resulting from such improper use or sale.

Document Number: DS\_S1411010 Version: C14