

SMD Schottky Diode

FEATURES

- Epitaxial planar die construction
- Surface device type mounting
- Moisture sensitivity level 1
- Matte Tin(Sn) lead finish with Nickel(Ni) underplate
- Packing code with suffix "G" means green compound (halogen-free)





3





MECHANICAL DATA

- Case: SOT- 23, molded plastic
- Terminal: Matte tin plated, lead free, solderable per MIL-STD-202, Method 208 guaranteed
- High temperature soldering guaranteed: 260°C/10s
- Weight: 0.008g (approximately)
- Marking Code: D3Q

MAXIMUM RATINGS AND ELECTRICAL CHARACTERSTICS (T _A =25°C unless otherwise noted)					
PARAMETER		SYMBOL	VALUE	UNIT	
Power Dissipation		P _D	200	mW	
Repetitive Peak Reverse Voltage		V_{RRM}	40	V	
Reverse Voltage		V_R	25	V	
Mean Forward Current		Io	350	mA	
Non-Repetitive Peak Forward Surge Current (Note 1)		I _{FSM}	1.5	А	
Junction and Storage Temperature Range		T. Tere	-40 to +125	°C	

PARAME	SYMBOL	MIN	MAX	UNIT	
Reverse Breakdown Voltage I _R =100µA		$V_{(BR)}$	40	-	V
Forward Voltage	I _F =10mA	V _F	-	0.32	V
Forward Voltage -	I _F =200mA	□ v _F	-	0.55]
Reverse Leakage Current V _R =25V		I _R	-	70	μΑ
Junction Capacitance V _R =0V, f=1.0MHz		CJ	-	50	pF

Note 1: Mean output current per element : I_O/2



RATINGS AND CHARACTERISTICS CURVES

(T_A=25°C unless otherwise noted)

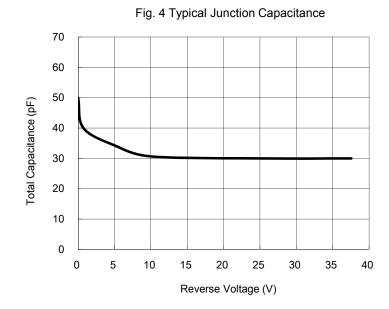
Fig. 1 Typical Forward Characteristics 1000 Forward Current (mA) 100 T_A=75°C 10 T_A=25°C 1 0.1 0.01 0.0 0.8 0.2 0.4 0.6 Instantaneous Forward Voltage (V)

Fig. 2 Reverse Current VS. Reverse Voltage 1000 T_A=75°C 100 Reverse Current (nA) T_A=25°C 10 0.1 0 10 20 100 30 40 50 60 70 80 90 Reverse Voltage (V)

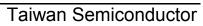
Fig. 3 Admissible Power Dissipation Curve

250
200
150
150
0
0
25 50 75 100 125 150

Ambient Temperature (°C)



Document Number: DS_S1409009 Version: G14





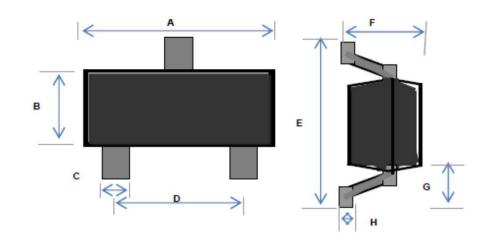
ORDERIN	ORDERING INFORMATION					
PART NO.	PART NO. SUFFIX (Note 1)	PACKING CODE	PACKING CODE SUFFIX	PACKAGE	PACKING	
RB495D	-xx	RF R5	G	SOT-23	3K / 7" Reel 10K / 13" Reel	

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
RB495D RF	RB495D		RF		Multiple manufacture source
RB495D RFG	RB495D		RF	G	Multiple manufacture source Green compound
RB495D-D0 RFG	RB495D	-D0	RF	G	Defined manufacture source Green compound
RB495D-B0 R5G	RB495D	-B0	R5	G	Defined manufacture source Green compound

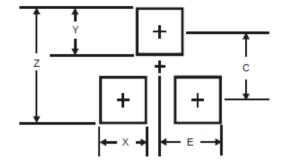


PACKAGE OUTLINE DIMENSIONS



DIM.	Unit((mm)	Unit(inch)		
DIIVI.	Min	Max	Min	Max	
Α	2.70	3.10	0.106	0.122	
В	1.10	1.50	0.043	0.059	
С	0.30	0.51	0.012	0.020	
D	1.78	2.04	0.070	0.080	
Е	2.10	2.64	0.083	0.104	
F	0.89	1.30	0.035	0.051	
G	0.55 REF		0.022 REF		
Н	0.10 REF		0.004 REF		

SUGGEST PAD LAYOUT



DIM.	Unit(mm)	Unit(inch)		
DIIVI.	Тур.	Тур.		
Z	2.8	0.110		
Х	0.7	0.028		
Υ	0.9	0.035		
С	1.9	0.075		
Е	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_S1409009 Version: G14