

Small Signal Product

**SMD Schottky Diode**

FEATURES

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

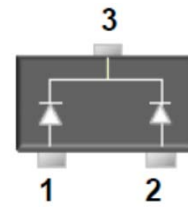


SOT-23



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 CHARACTERISTICS (T <sub>A</sub> =25°C unless otherwise noted)			
PARAMETER	SYMBOL	VALUE	UNIT
Power Dissipation	P <sub>D</sub>	200	mW
Repetitive Peak Reverse Voltage	V <sub>R</sub> RM	40	V
Reverse Voltage	V <sub>R</sub>	25	V
Mean Forward Current	I <sub>O</sub>	350	mA
Non-Repetitive Peak Forward Surge Current (Note 1)	I <sub>FSM</sub>	1.5	A
Junction and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-40 to +125	°C

PARAMETER	SYMBOL	MIN	MAX	UNIT
Reverse Breakdown Voltage I <sub>R</sub> =100µA	V <sub>(BR)</sub>	40	-	V
Forward Voltage I <sub>F</sub> =10mA I <sub>F</sub> =200mA	V <sub>F</sub>	-	0.32	V
		-	0.55	
Reverse Leakage Current V <sub>R</sub> =25V	I <sub>R</sub>	-	70	µA
Junction Capacitance V <sub>R</sub> =0V, f=1.0MHz	C <sub>J</sub>	-	50	pF

Note 1: Mean output current per element : I<sub>O</sub>/2

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RATINGS AND CHARACTERISTICS CURVES

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

Fig. 1 Typical Forward Characteristics

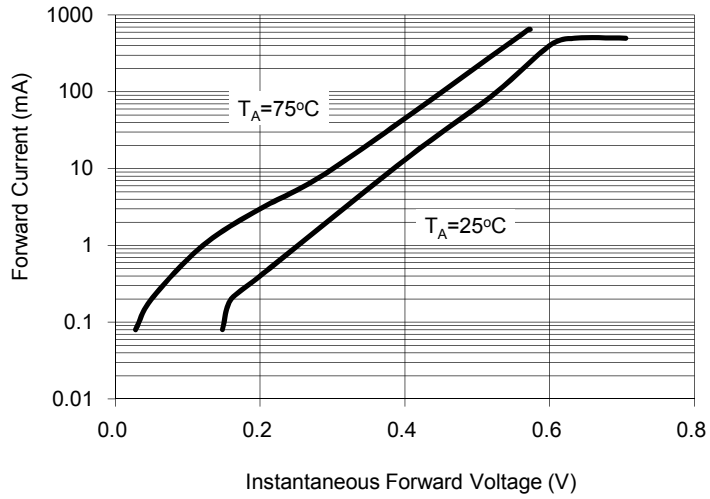


Fig. 2 Reverse Current VS. Reverse Voltage

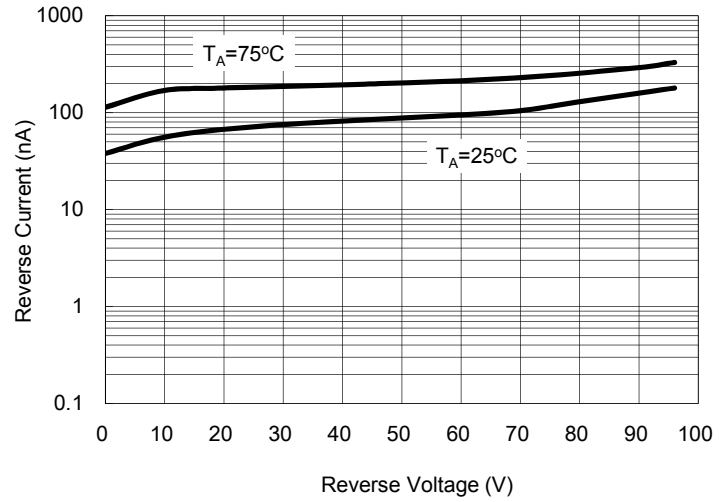


Fig. 3 Admissible Power Dissipation Curve

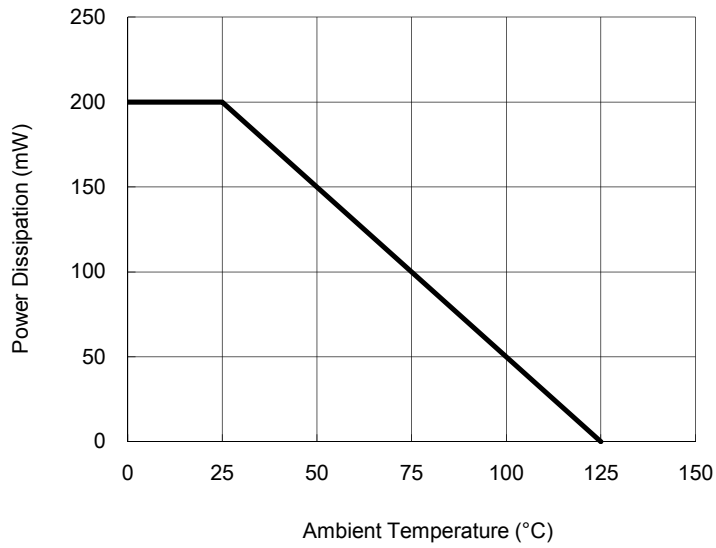
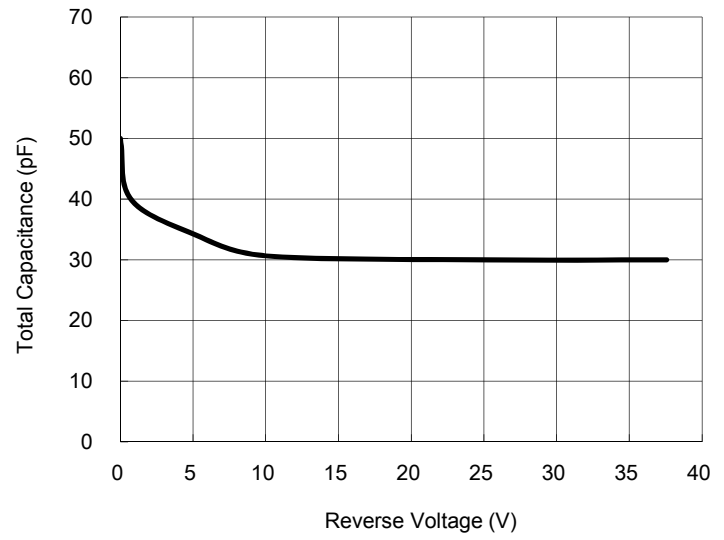


Fig. 4 Typical Junction Capacitance



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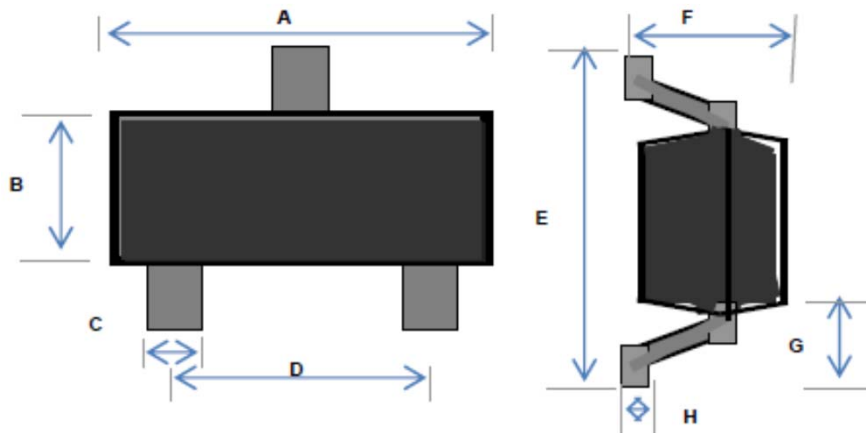
ORDERING INFORMATION					
PART NO.	PART NO. SUFFIX (Note 1)	PACKING CODE	PACKING CODE SUFFIX	PACKAGE	PACKING
RB495D	-xx	RF	G	SOT-23	3K / 7" Reel
		R5			10K / 13" Reel

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

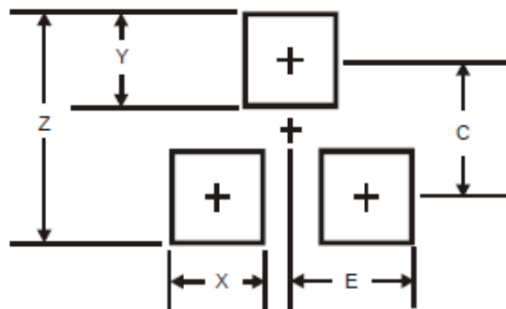
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PACKAGE OUTLINE DIMENSIONS



DIM.	Unit(mm)		Unit(inch)	
	Min	Max	Min	Max
A	2.70	3.10	0.106	0.122
B	1.10	1.50	0.043	0.059
C	0.30	0.51	0.012	0.020
D	1.78	2.04	0.070	0.080
E	2.10	2.64	0.083	0.104
F	0.89	1.30	0.035	0.051
G	0.55 REF		0.022 REF	
H	0.10 REF		0.004 REF	

SUGGEST PAD LAYOUT



DIM.	Unit(mm)	Unit(inch)
	Typ.	Typ.
Z	2.8	0.110
X	0.7	0.028
Y	0.9	0.035
C	1.9	0.075
E	1.0	0.039

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