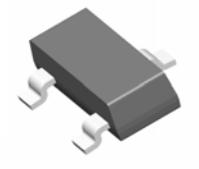
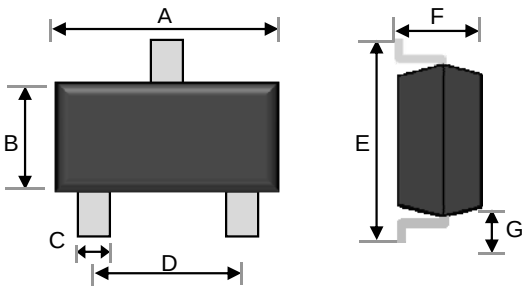
TAIWAN SEMICONDUCTOR

RB495D
40V, 350mA, SMD Schottky Diode

Small Signal Diode



SOT23



Dimensions	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	2.65	3.05	0.104	0.120
B	1.19	1.40	0.047	0.055
C	0.37	0.51	0.015	0.020
D	1.78	2.05	0.070	0.080
E	2.10	2.50	0.083	0.098
F	0.89	0.11	0.035	0.043
G	0.45	0.61	0.018	0.024

Features

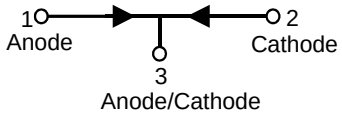
- ✧Low V_F, Low I_R, High Reliability Schottky Diode
- ✧Surface device type mounting
- ✧Moisture sensitivity level 1
- ✧Matte Tin(Sn) lead finish with Nickel(Ni) underplate
- ✧Pb free version and RoHS compliant
- ✧Green compound (Halogen free) with suffix "G" on packing code and prefix "G" on date code

Mechanical Data

- ✧Case :SOT-23 small outline plastic package
- ✧Terminal: Matte tin plated, lead free., solderable per MIL-STD-202, Method 208 guaranteed
- ✧High temperature soldering guaranteed: 260°C/10s
- ✧Weight :0.008 gram (approximately)

Ordering Information

Part No.	Package	Packing
RB495D RF	SOT23	3Kpcs/7" Reel



Electrical Symbol

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Maximum Ratings

Type Number	Symbol	Value	Units
Power Dissipation	P_D	200	mW
Repetitive Peak Reverse Voltage	V_{RRM}	40	V
Reverse Voltage	V_R	25	V
Mean Forward Current	I_O	350	mA
Non-Repetitive Peak Forward Surge Current (Note 1)	I_{FSM}	1.5	A
Junction and Storage Temperature Range	T_J, T_{STG}	-40 to + 125	°C

Electrical Characteristics

Type Number			Symbol	Min	Max	Units
Reverse Breakdown Voltage	I_R=	100μA	$V_{(BR)}$	40	-	V
Forward Voltage	I_F=	10mA	V_F	-	0.3	V
	I_F=	200mA		-	0.5	
Reverse Leakage Current	V_R=	25V	I_R	-	70	μA
Junction Capacitance	V_R=0, f=1.0MHz		C_J	-	50	pF

Notes:1. 8.3ms singlehalf Sine-wave

Small Signal Diode

Rating and Sharacteristic Curves

FIG 1 Typical Forward Characteristics

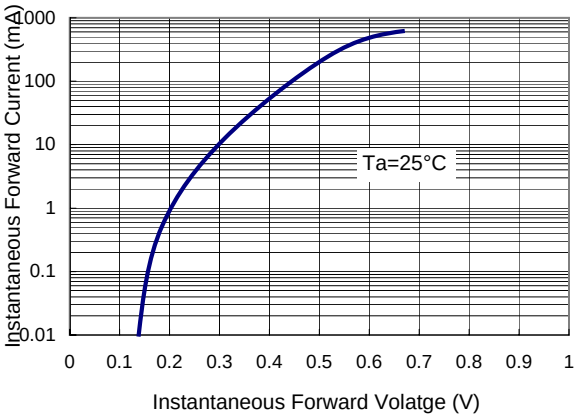


FIG 2 Reverse Current vs Reverse Voltage

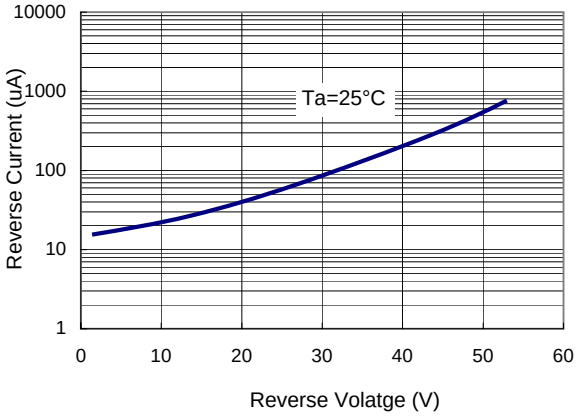


FIG 3 Admissible Power Dissipation Curve

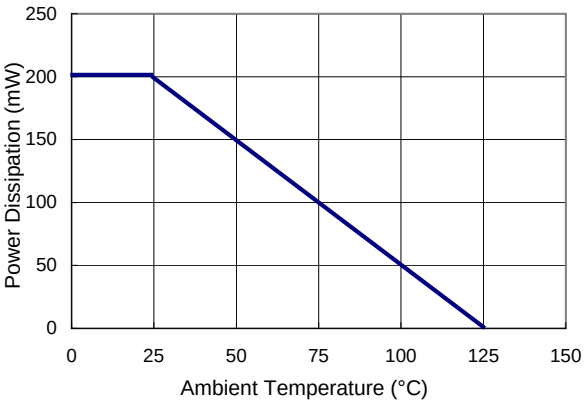


FIG 4 Typical Junction Capacitance