

Surface Mount Low Barrier Schottky Diode

Descriptions

- The series of detector diode can be packed in many forms to meet demands in different application scenes. We should ensure that when two diodes are installed in one surface packaging, they are taken out from adjacent positions of the same wafer, to ensure high matching degree on performance.



Please observe the matters needing attention for treatment of quiescent sensitive equipment

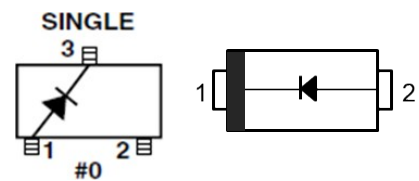
ESD machine discharging mode (Level A)

ESD human body discharging mode (Level 0)

Characteristics

- Multiple packaging forms for SOT-23 and SOD523
- High detection sensitivity (36 mV/μW)
- Can be made as the banding and the scrolling packaging forms
- Dual-diode packaging for high matching degree
- Better thermal conductivity for high power dissipation
- Lead free

SOT-23 and SOD523 packaging marking



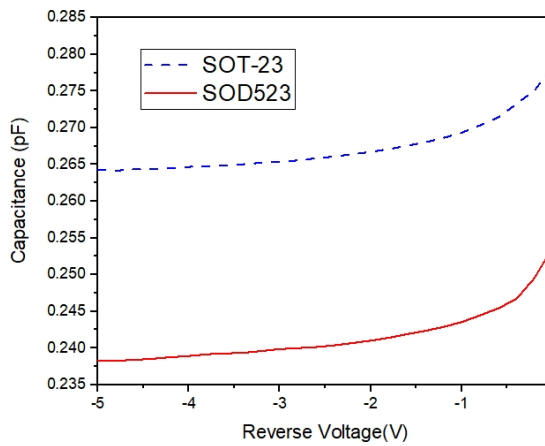
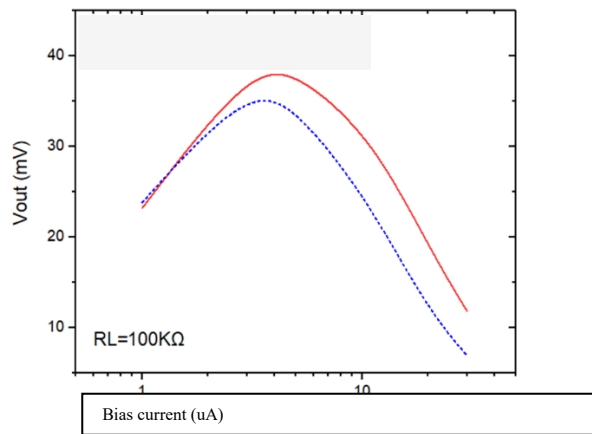
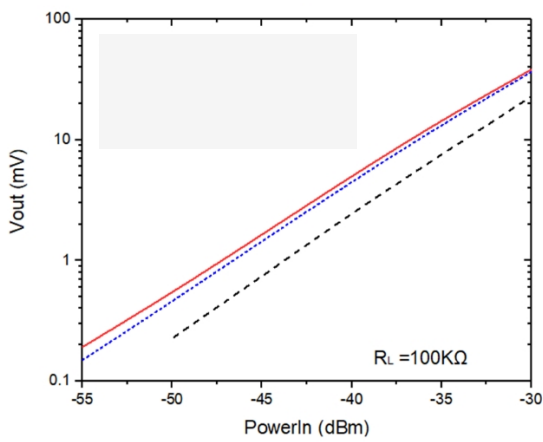
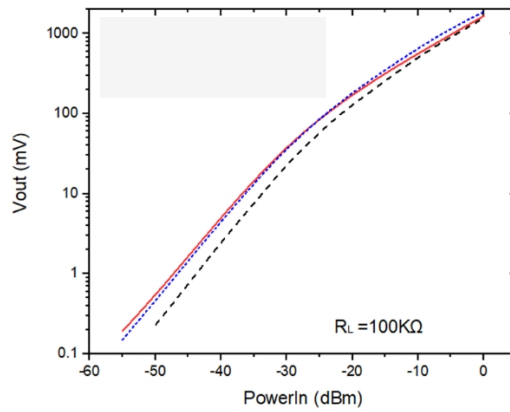
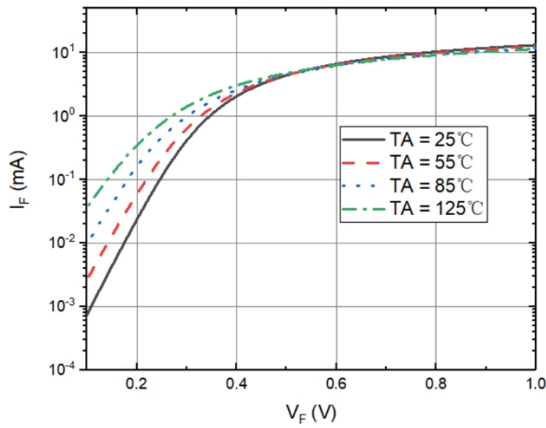
DC electrical property specifications, Tc=+25°C

Parameters	Testing conditions	Typical value
Breakdown voltage V_{BD}	$I_R = -10\mu A$	8V Max, 5V Min
Reverse leakage current I_R	$V_R = -3V$	900nA Max, 60nA Min
Threshold voltage V_F	$I_F = 1mA$	350 mV
Forward voltage drop V_{10mA}	$I_F = 10mA$	0.8 V
Capacitor C_T	$V_R = 0V, f = 1MHz$	0.28pF

Radio frequency electrical property specifications, Tc=+25°C

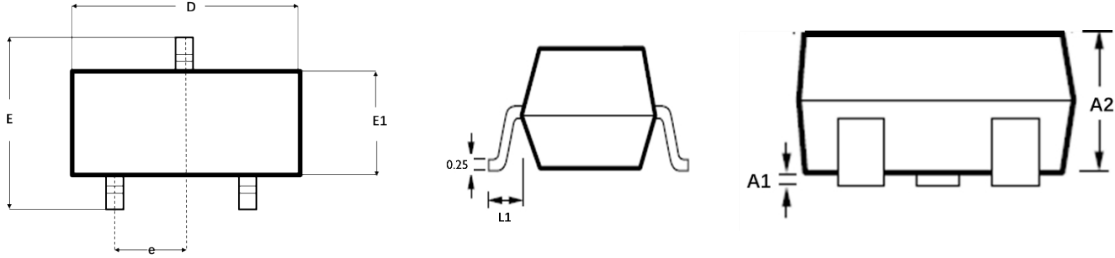
Parameters	Testing conditions (f=7.5 GHz)	Typical value
Voltage sensitivity	Power in = -30 dBm, $R_L = 100 K\Omega, I_b = 3 \mu A$	36 mV/μW
Video resistance R_V	$I_b = 5 \mu A$	6.5KΩ

Performance curve



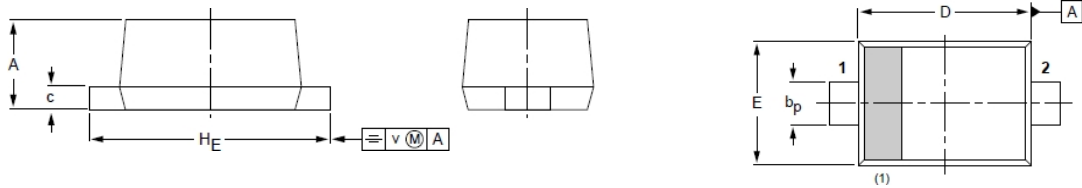
Package Dimension Diagram:

SOT-23



Symbol	Dimension (mm)	
	Min	Max
A1	0.04	0.10
A2	1.00	1.20
D	2.82	3.02
E	2.60	3.00
E1	1.50	1.70
e	0.95BSC	
L1	0.60REF	

SOD-523



Symbol	Dimension (mm)	
	Min	Max
A	0.58	0.65
bp	0.26	0.34
c	0.11	0.17
D	1.15	1.25
E	0.75	0.85
HE	1.55	1.65
V	0.1	