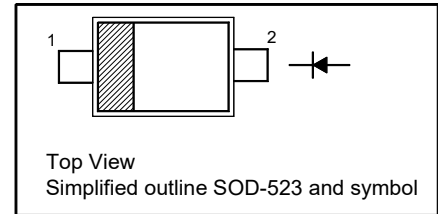


1SS277WT

Silicon Epitaxial Planar Band Switching Diode

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Applications

- Low loss band switching in VHF television tuners
- Surface mount band switching circuits

Absolute Maximum Ratings ($T_a = 25\text{ }^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Reverse Voltage	V_R	35	V
Continuous Forward Current	I_F	100	mA
Power Dissipation	P_{tot}	200	mW
Junction Temperature	T_J	- 55 to + 125	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 125	$^\circ\text{C}$

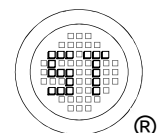
Thermal Characteristics

Parameter	Symbol	Max.	Unit
Thermal Resistance from Junction to Ambient ¹⁾	$R_{\theta JA}$	500	$^\circ\text{C/W}$

¹⁾ Device mounted on FR-4 substrate PC board, 2oz copper, with minimum recommended pad layout.

Characteristics at $T_a = 25\text{ }^\circ\text{C}$

Parameter	Symbol	Min.	Max.	Unit
Forward Voltage at $I_F = 10\text{ mA}$	V_F	-	1	V
Reverse Voltage at $I_R = 10\text{ }\mu\text{A}$	V_R	35	-	V
Reverse Current at $V_R = 25\text{ V}$	I_R	-	50	nA
Diode Forward Resistance at $I_F = 2\text{ mA}$, $f = 100\text{ MHz}$	r_f	-	0.7	Ω
Capacitance at $f = 1\text{ MHz}$, $V_R = 6\text{ V}$	C_d	-	1.2	pF



Electrical Characteristics Curves

Fig 1. Forward Current Derating Curve

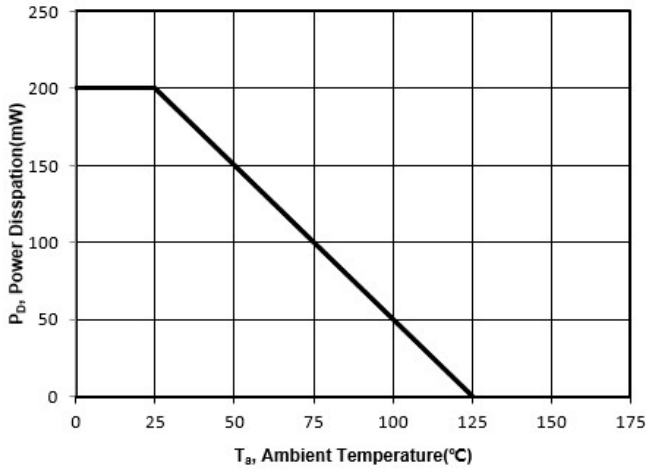


Fig 2. Junction Capacitance

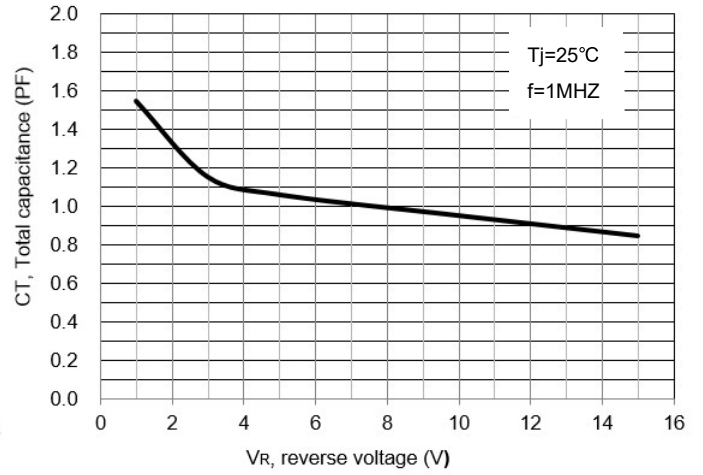


Fig 3. r_s vs. I_F Curve

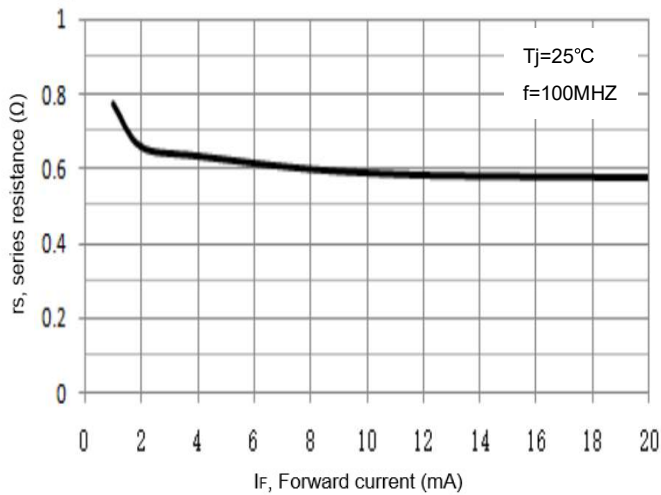
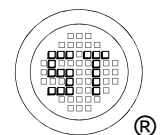
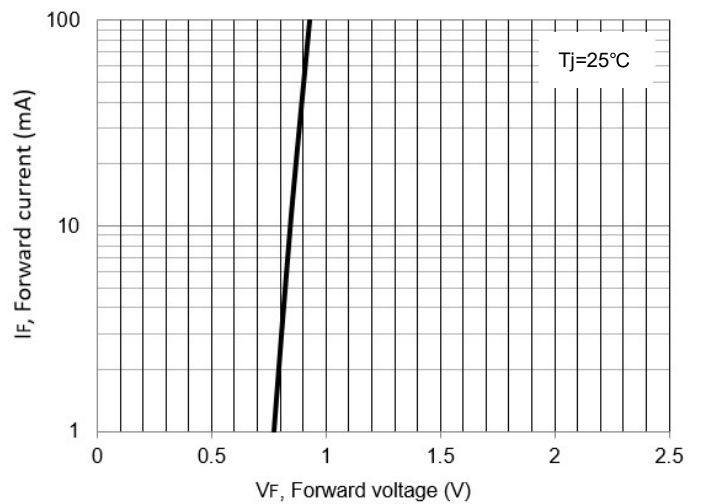


Fig 4. Forward Characteristic Curve

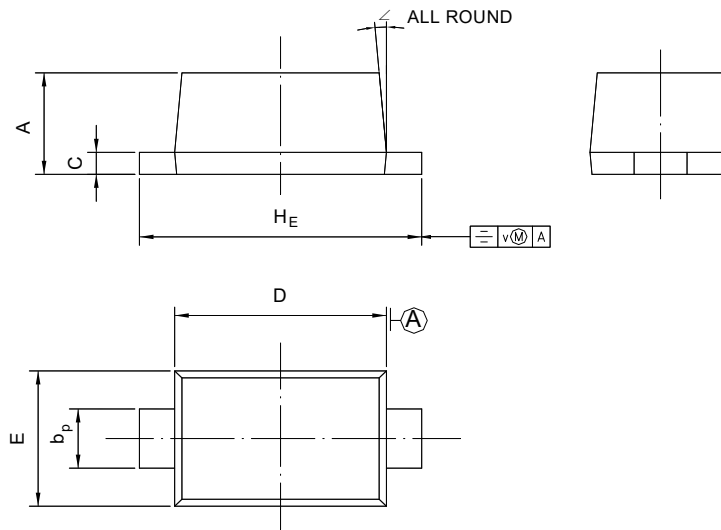


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PACKAGE OUTLINE

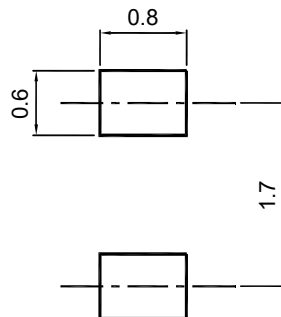
Plastic surface mounted package

SOD-523



UNIT	A	b _p	C	D	E	H _E	V	∠
mm	0.70 0.60	0.4 0.3	0.135 0.100	1.25 1.15	0.85 0.75	1.7 1.5	0.1	5°

Recommended Soldering Footprint



Packing information

Package	Tape Width (mm)	Pitch		Reel Size		Per Reel Packing Quantity
		mm	inch	mm	inch	
SOD-523	8	4 ± 0.1	0.157 ± 0.004	178	7	4,000

Marking information

" L " = Part No.
 " III " = Cathode line
 Font type: Arial

