

BA782

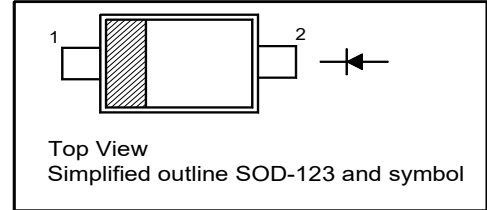
Band Switching Diode

Applications

- For electric band switching in radio and TV tuners in the frequency range of (50 to 1000) MHz

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

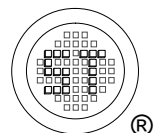


Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Limits	Unit
Reverse voltage	V_R	35	V
Forward continuous current	I_F	100	mA
Junction temperature	T_j	125	$^\circ\text{C}$
Storage temperature	T_{stg}	- 55 to + 125	$^\circ\text{C}$

Electrical Characteristics ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Min.	Max	Unit
Reverse Breakdown Voltage at $I_R = 10 \mu\text{A}$	$V_{(\text{BR})R}$	35	-	V
Forward voltage at $I_F = 100 \text{ mA}$	V_F	-	1	V
Leakage current at $V_R = 20 \text{ V}$	I_R	-	50	nA
Capacitance at $V_R = 1 \text{ V}$, $f = 1 \text{ MHz}$ at $V_R = 3 \text{ V}$, $f = 1 \text{ MHz}$	C_{tot}	- -	1.5 1.25	pF
Dynamic forward resistance at $f = (50 \text{ to } 1000) \text{ MHz}$, $I_F = 3 \text{ mA}$ at $f = (50 \text{ to } 1000) \text{ MHz}$, $I_F = 10 \text{ mA}$	r_f	- -	0.7 0.5	Ω



Electrical Characteristics Curves

Fig 1. Forward Characteristics

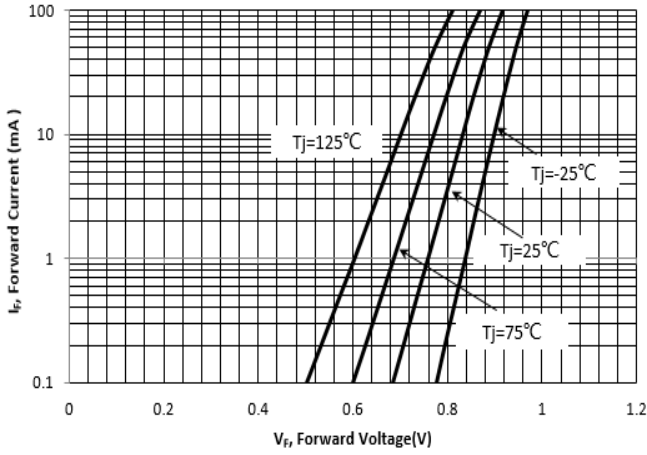


Fig 2. Reverse Characteristics

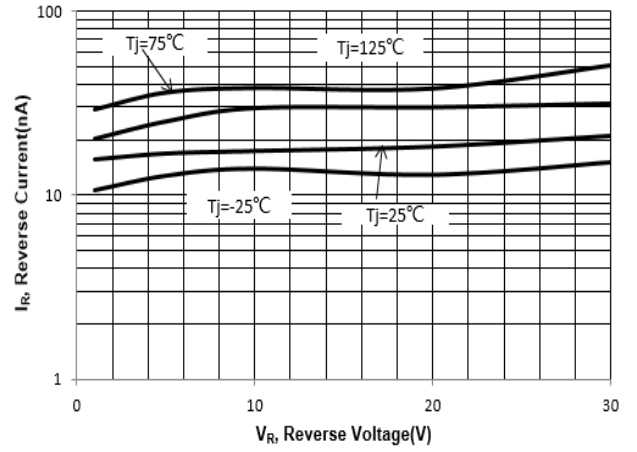


Fig 3. Capacitance Characteristics

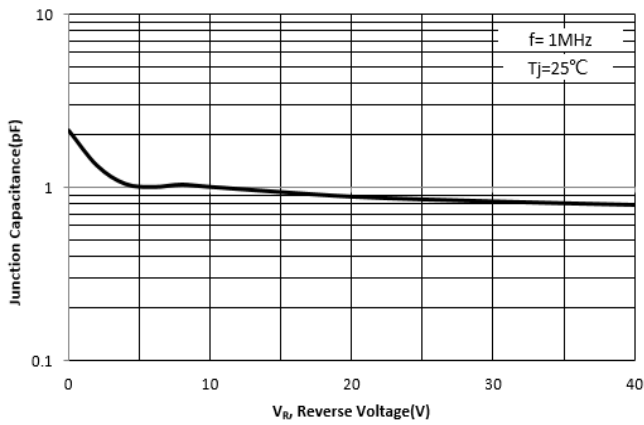
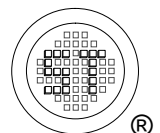
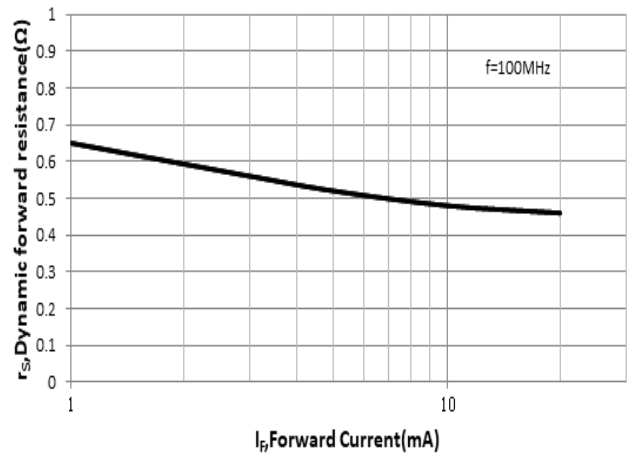


Fig 4. Resistance Characteristics

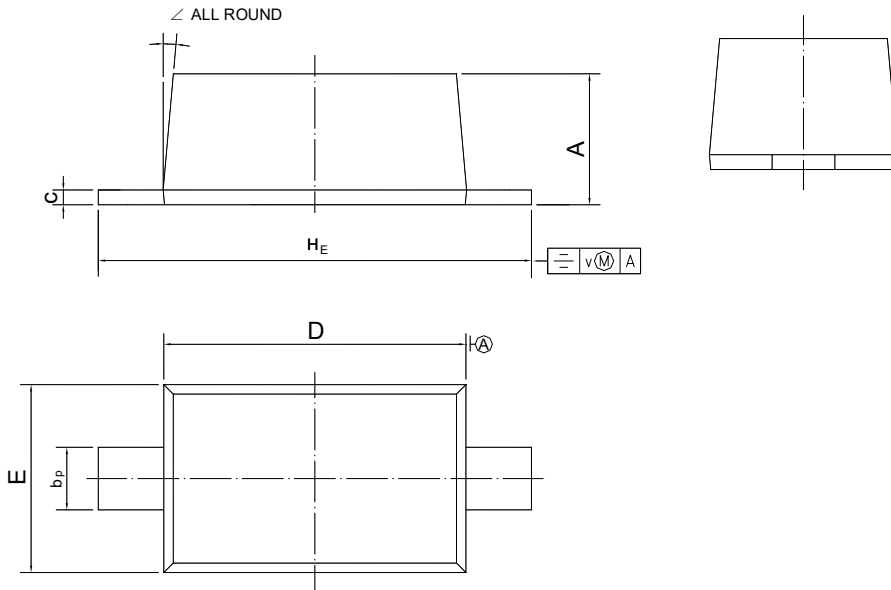


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PACKAGE OUTLINE

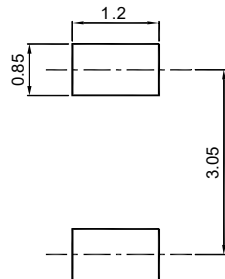
Plastic surface mounted package; 2 leads

SOD-123



UNIT	A	b _p	c	D	E	H _E	v	∠
mm	1.15 1.05	0.6 0.5	0.135 0.100	2.7 2.6	1.65 1.55	3.85 3.55	0.2	5°

Recommended Soldering Footprint



Packing information

Package	Tape Width (mm)	Pitch		Reel Size		Per Reel Packing Quantity
		mm	(inch)	mm	(inch)	
SOD-123	8	4 ± 0.1	0.157 ± 0.004	178	7	3,000

Marking information

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

