



Features

- .Small total capacitance:CT=1.3Pf(Max)
- .Low series resistance:rf ≤0.4Ω
- .Package : SOD-523



SOD-523

Application

- .VHF/UHF Tuner Band Switch



Maximum Ratings

Parameter	Symbol	Min	Max	Unit
Assignment Temperature Range	T _{amb}	-55	100	°C
Storage Temperature Range	T _{atg}	-55	125	°C
Maximum Reverse voltage	V _{RM}		30	V
Junction Temperature	T _j		125	°C
Forward Voltage(I _F =20mA)	V _F		1	V

Electrical Characteristics (Ta=25 unless otherwise specified)

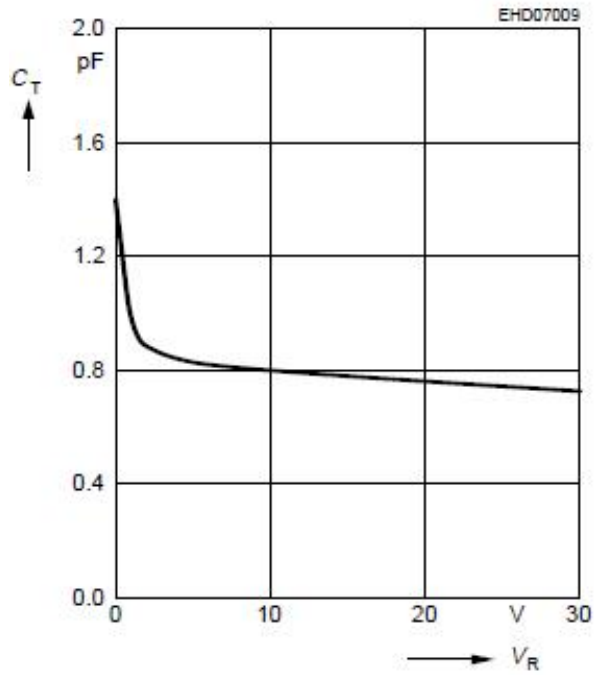
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Forward Voltage	V _F	I _F =100mA			1.0	V
Diode Capacitance	C _T	V _R =1V		0.8	1.3	PF
Reverse Current	I _R	V _R =20V			20	nA
Series Inductance	L _S	I _F =20mA		0.6		nH
Series Resistance	R _F	F=100MHz, I _F =10mA		0.4		Ω



Typical Characteristics

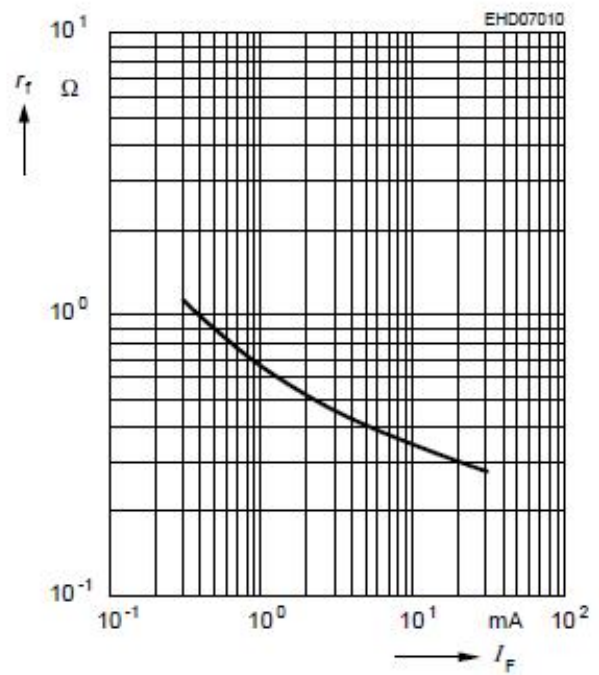
Diode capacitance $C_T = f(V_R)$

$f = 1\text{MHz}$



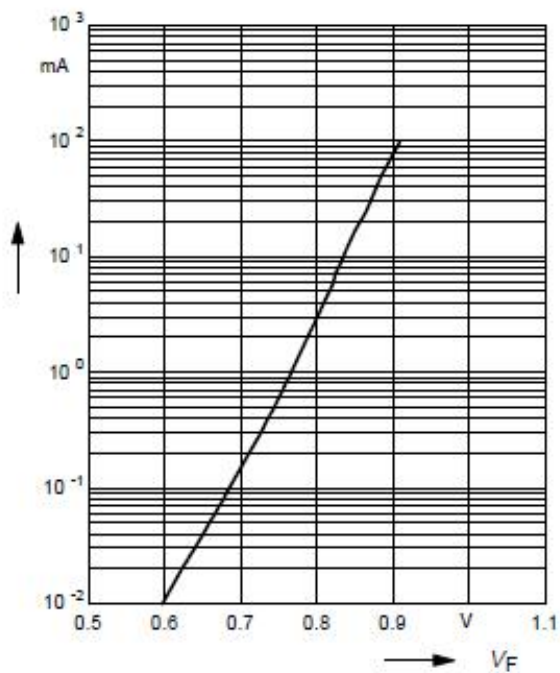
Forward resistance $r_f = f(I_F)$

$f = 100\text{MHz}$



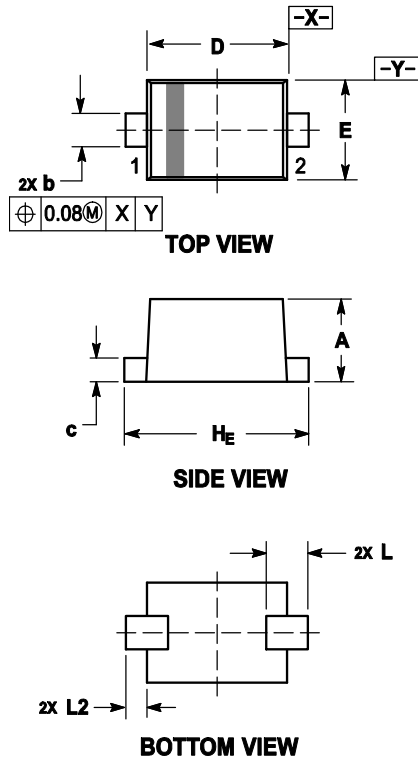
Forward current $I_F = f(V_F)$

$T_A = 25^\circ\text{C}$





Outline And Dimensions

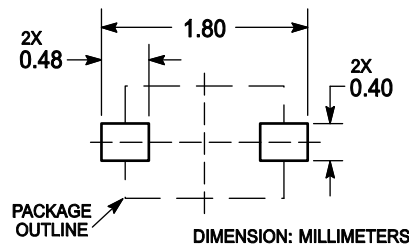


Notes:

1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
2. CONTROLLING DIMENSION: MILLIMETERS.
3. MAXIMUM LEAD THICKNESS INCLUDES LEAD FINISH. MINIMUM LEAD THICKNESS IS THE MINIMUM THICKNESS OF BASE MATERIAL.
4. DIMENSIONS D AND E DO NOT INCLUDE MOLD FLASH, PROTRUSIONS OR GATE BURRS.

DIM	MILLIMETERS			INCHES		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.50	0.60	0.70	0.020	0.024	0.028
b	0.25	0.30	0.35	0.010	0.012	0.014
c	0.07	0.14	0.20	0.003	0.006	0.008
D	1.10	1.20	1.30	0.043	0.047	0.051
E	0.70	0.80	0.90	0.028	0.031	0.035
H _E	1.50	1.60	1.70	0.059	0.063	0.067
L	0.30 REF			0.012 REF		
L ₂	0.15	0.20	0.25	0.006	0.008	0.010

Soldering Footprint





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