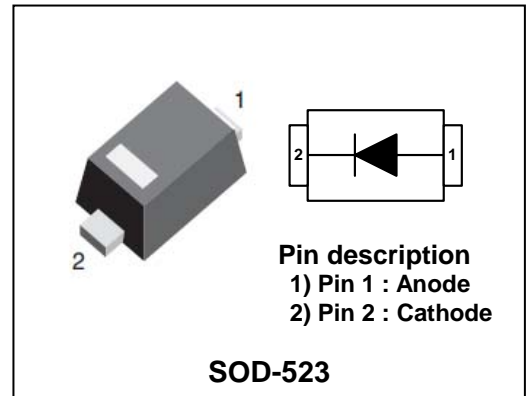


## Description

General purpose PIN diode in a SOD-523 small SMD plastic package.

## Feature

- Low capacitance :  $C_T=0.25\text{pF(Typ.)}$
- Low series resistance :  $r_S=1.5\Omega(\text{Typ.})$
- Full lead (Pb)-free and RoHS compliant device
- Available in Green EMC



## Applications

- VHF tuner band RF attenuator
- AGC for FM tuner

## Ordering Information

Device	Marking Code <sup>1)</sup>	Package	Packaging
SDP510Q	<b>P2</b> □ ① ②	SOD-523	Tape & Reel

\* Note 1) : ① Device code, ② Year & Week code

## Absolute Maximum Ratings (Ta=25°C, Unless otherwise specified)

Characteristic	Symbol	Ratings	Unit
Continuous reverse voltage	$V_R$	50	V
Forward current	$I_F$	50	mA
Junction temperature	$T_J$	150	°C
Storage temperature	$T_{stg}$	-55 ~ 150	°C

**Electrical Characteristics** (Ta=25°C, Unless otherwise specified)

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Reverse voltage	$V_R$	$I_R=10\mu A$	50	-	-	V
Reverse current	$I_R$	$V_R=50V$	-	-	0.1	$\mu A$
Forward voltage	$V_F$	$I_F=50mA$	-	0.95	-	V
Total capacitance	$C_T$	$V_R=50V, f=1MHz$	-	0.25	-	pF
Series resistance	$r_S$	$I_F=10mA, f=100MHz$	-	1.5	-	$\Omega$

Rating and Characteristic Curves

Fig. 1  $C_T - V_R$

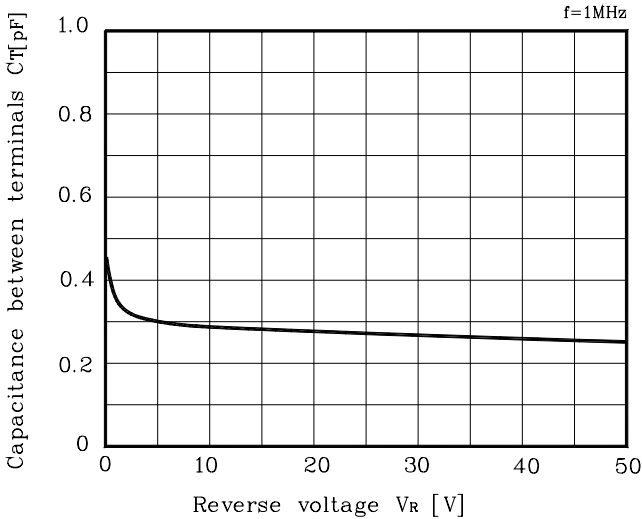
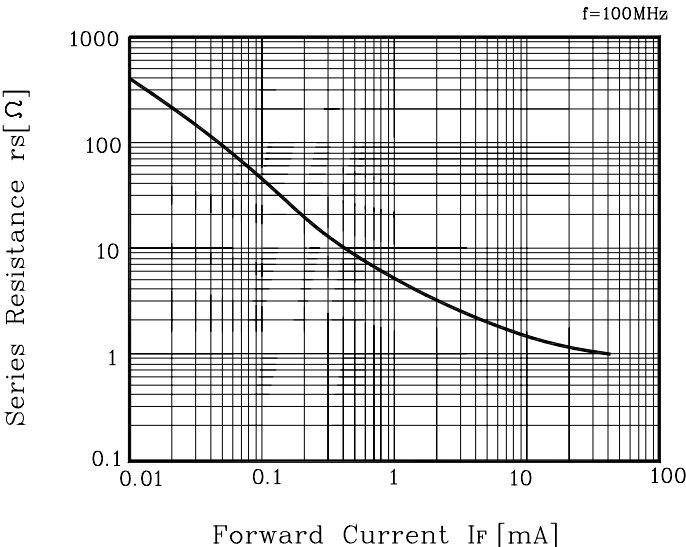
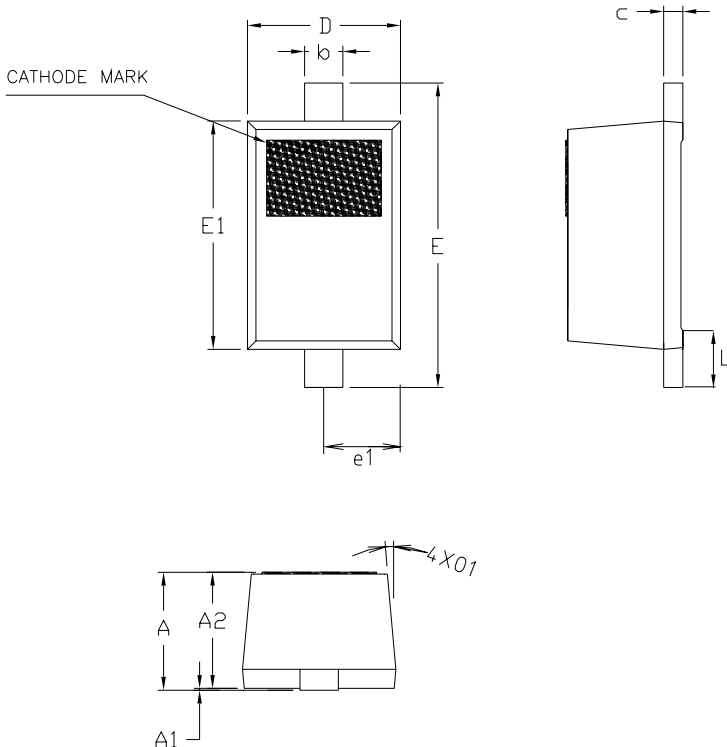


Fig. 2  $r_s - I_F$

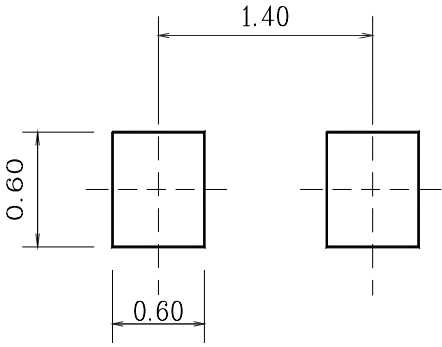


Package Outline Dimension



SYMBOL	MILLIMETERS			NOTE
	MINIMUM	NOMINAL	MAXIMUM	
A	0.60	0.70	0.80	
A1	0.00	—	0.10	
A2	0.50	0.60	0.70	
b	0.18	0.25	0.32	
c	0.08	0.12	0.16	
D	0.70	0.80	0.90	
E	1.50	1.60	1.70	
E1	1.10	1.20	1.30	
e1	0.40 BSC			
L	0.20	0.30	0.40	
theta1	4°	—	10°	

※ Recommend PCB solder land [Unit : mm]



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