



# SDP510WM

Pin Diode

## Features

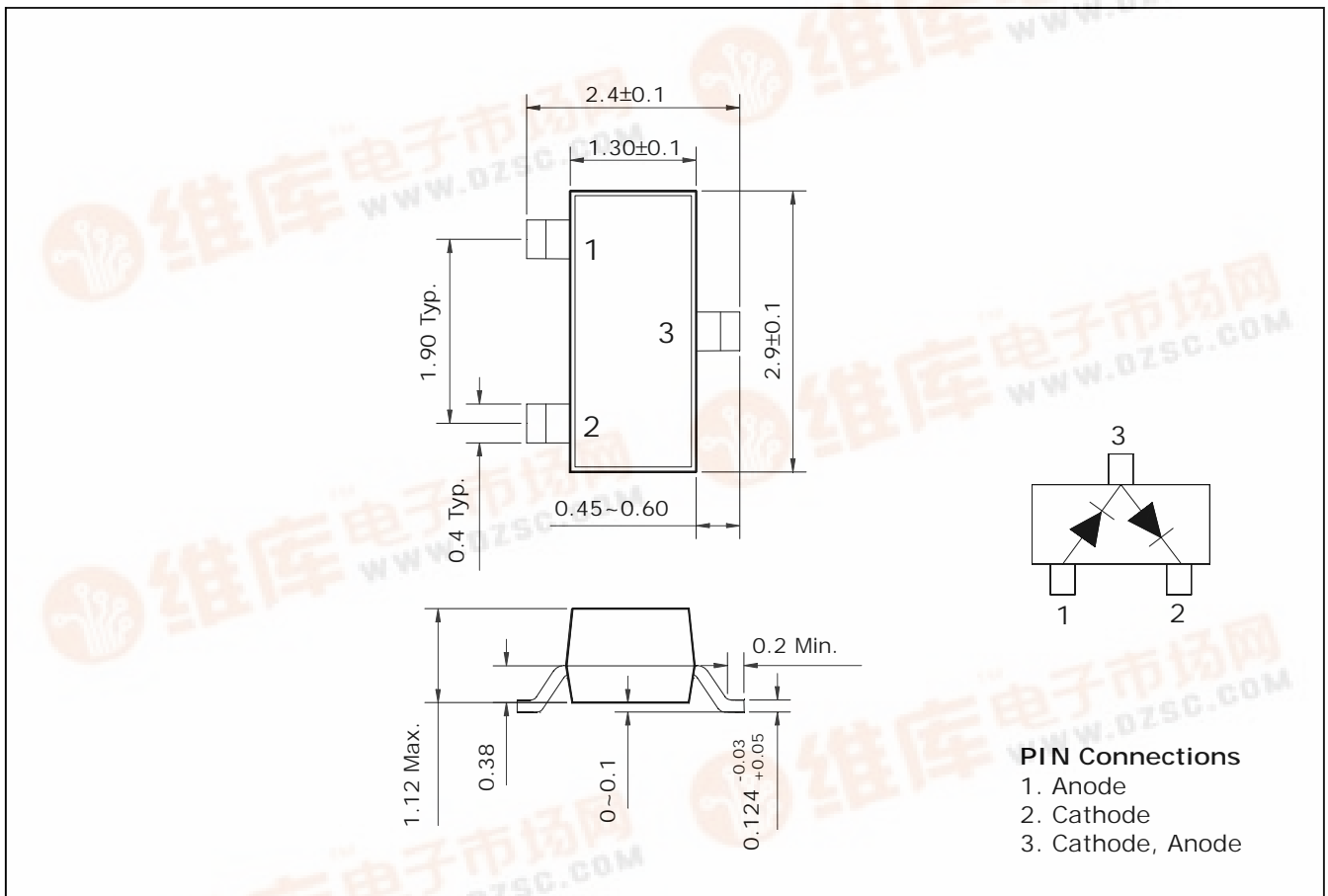
- SMD package : SOT-23
- Low capacitance :  $C_T=0.25\text{pF(Typ.)}$
- Low series resistance :  $r_s=1.5\Omega\text{(Typ.)}$
- VHF tuner band RF attenuator application
- AGC for FM tuner

## Ordering Information

Type No.	Marking	Package Code
SDP510WM	W5M	SOT-23

## Outline Dimensions

unit : mm



# SDP510WM

## Absolute maximum ratings

Ta=25°C

Characteristic	Symbol	Ratings	Unit
Continuous reverse voltage	V <sub>R</sub>	50	V
Forward current	I <sub>F</sub> <sup>*</sup>	50	mA
Junction temperature	T <sub>j</sub>	150	°C
Storage temperature	T <sub>stg</sub>	-55 ~ 150	°C

\* : Unit ratings. Total rating = Unit rating × 1.5

## Electrical Characteristics

Ta=25°C

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Reverse voltage	V <sub>R</sub>	I <sub>F</sub> =10μA	50	-	-	V
Reverse current	I <sub>R</sub>	V <sub>R</sub> =50V	-	-	0.1	μA
Forward voltage	V <sub>F</sub>	I <sub>F</sub> =50mA	-	0.95	-	V
Total capacitance	C <sub>T</sub>	V <sub>R</sub> =50V, f=1MHz	-	0.25	-	pF
Series resistance	r <sub>S</sub>	I <sub>F</sub> =10mA, f=100MHz	-	1.5	-	Ω

Electrical Characteristic Curves

Fig. 1  $C_T-V_R$

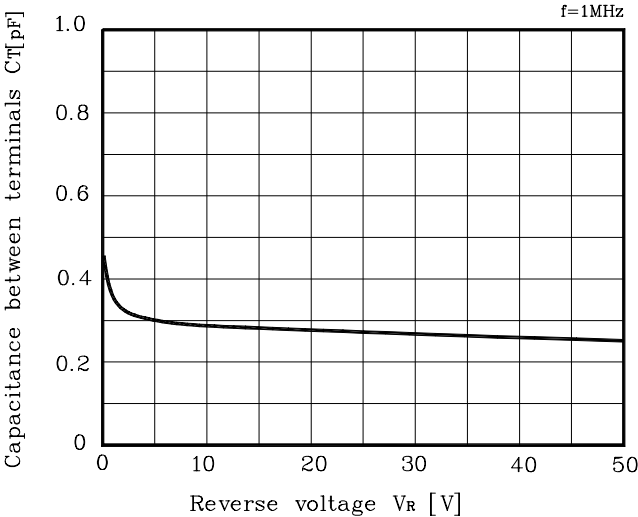


Fig. 2  $r_s-I_F$

