



SDP520Q

Attenuator Diode

Features

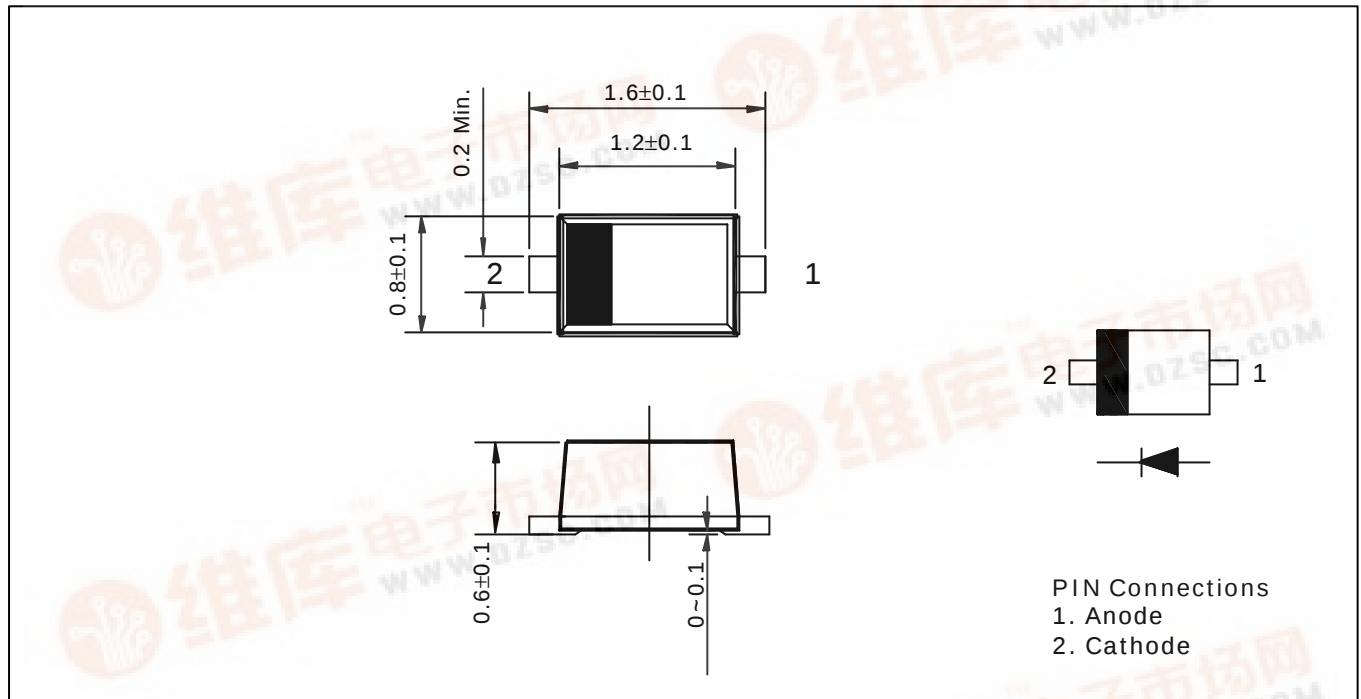
- SMD package : SOD-523
- Low capacitance : $C_T = 0.25\text{pF(Typ.)}$
- Low series resistance : $r_s = 7\Omega\text{(Typ.)}$
- VHF tuner band RF attenuator application
- AGC for FM tuner

Ordering Information

Type No.	Marking	Package Code
SDP520Q	2M	SOD-523

Outline Dimensions

unit : mm



SDP520Q

Absolute maximum ratings

Ta=25°C

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

* : Unit ratings. Total rating = Unit rating $\times$ 1.5

Electrical Characteristics

Ta=25°C

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	μA
Forward voltage	V_F	$I_F = 50mA$	-	0.95	-	V
Total capacitance	C_T	$V_R = 50V, f = 1MHz$	-	0.25	0.5	pF
Series resistance	r_S	$I_F = 0.01mA, f = 100MHz$	-	2800	-	Ω
		$I_F = 0.1mA, f = 100MHz$	-	380	-	Ω
		$I_F = 1mA, f = 100MHz$	-	45	-	Ω
		$I_F = 10mA, f = 100MHz$	-	7	-	Ω

Fig. 1 $I_C - T_a$

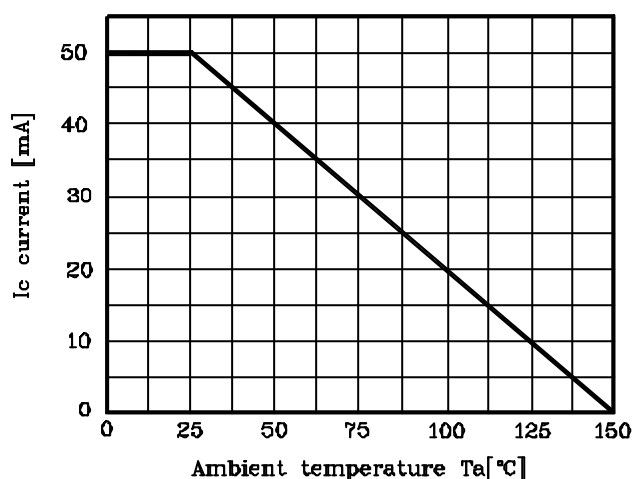


Fig. 2 $I_F - V_F$

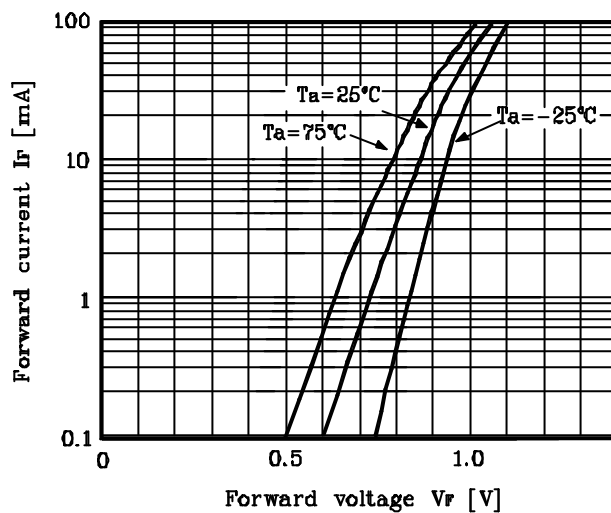


Fig. 3 $C_T - V_R$

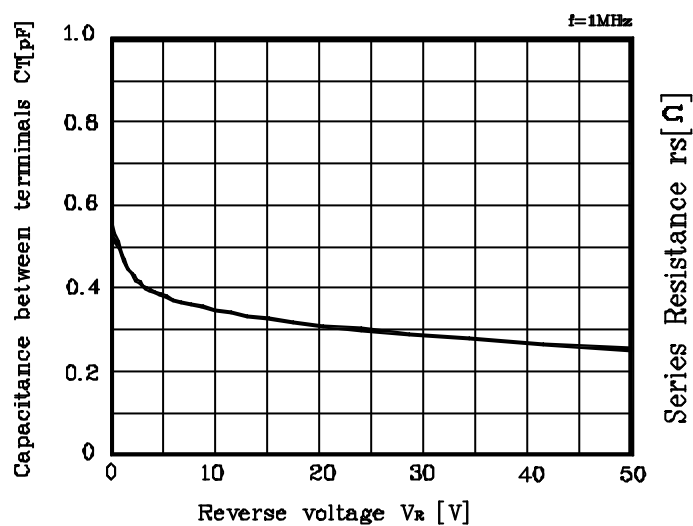


Fig. 4 $r_s - I_F$

