



SDP540Q

Antenna Switching Pin Diode

Features

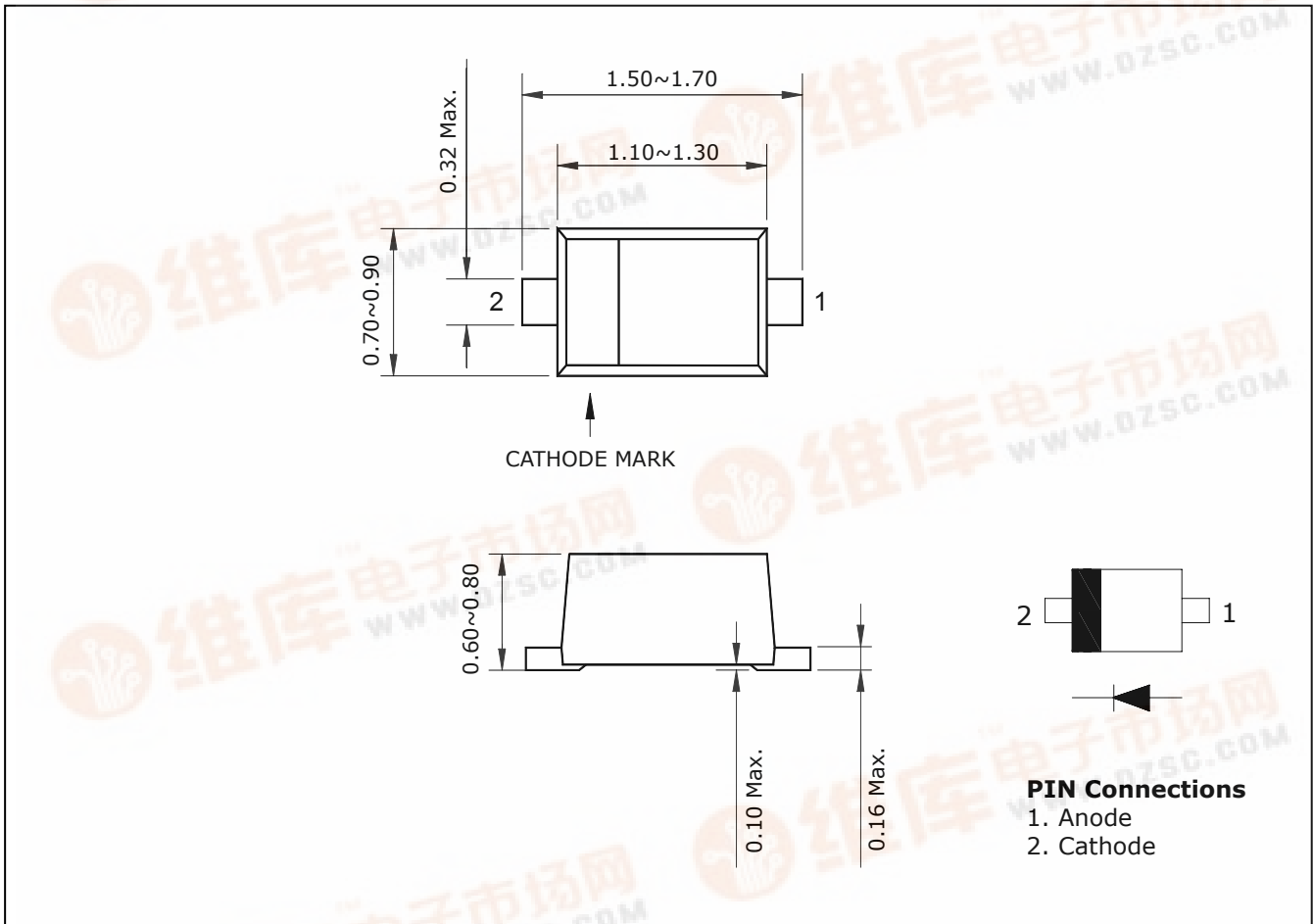
- Low capacitance : Max.0.4pF
- Low series resistance : $r_s = 1.0\Omega$ (Typ.)@ $I_F = 10\text{mA}$
- UHF/VHF Band RF Switch Applications

Ordering Information

Type No.	Marking	Package Code
SDP540Q	E4	SOD-523

Outline Dimensions

unit : mm



SDP540Q

Absolute Maximum Ratings

(Ta=25°C)

Characteristic	Symbol	Rating	Unit
Continuous reverse voltage	V_R	30	V
Forward current	I_F	50	mA
Junction temperature	T_j	150	°C
Storage temperature range	T_{stg}	-55 ~ 150	°C

Electrical Characteristics

(Ta=25°C)

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Reverse voltage	V_R	$I_R=10\mu A$	30	-	-	V
Reverse current	I_R	$V_R=30V$	-	-	0.1	μA
Forward voltage	V_F	$I_F=50mA$	-	0.9	-	V
Total capacitance	C_T	$V_R=1V, f=1MHz$	-	0.3	0.4	pF
Series resistance	r_S	$I_F=10mA, f=100MHz$	-	1.0	1.5	Ω

Electrical Characteristic Curves

Fig. 1 $r_s - I_F$

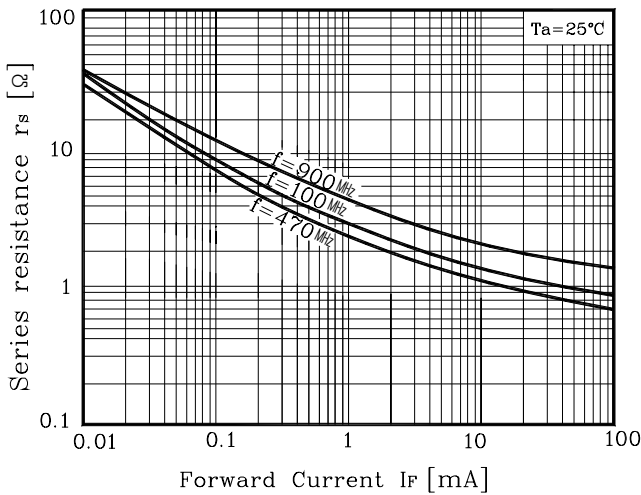


Fig. 2 $C_T - V_R$

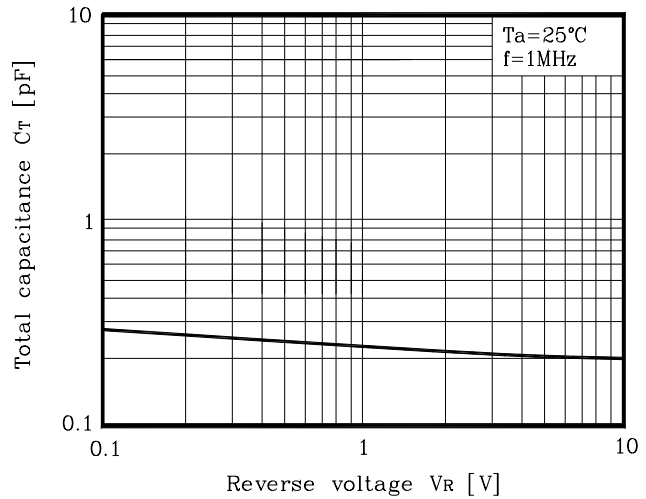
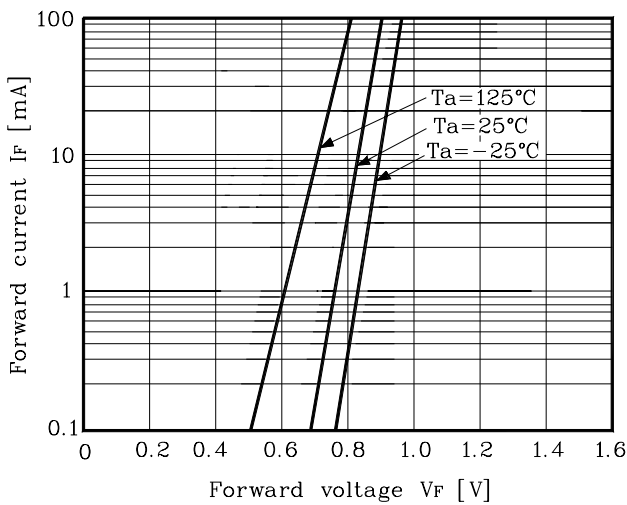


Fig. 3 $I_F - V_F$



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