

Features

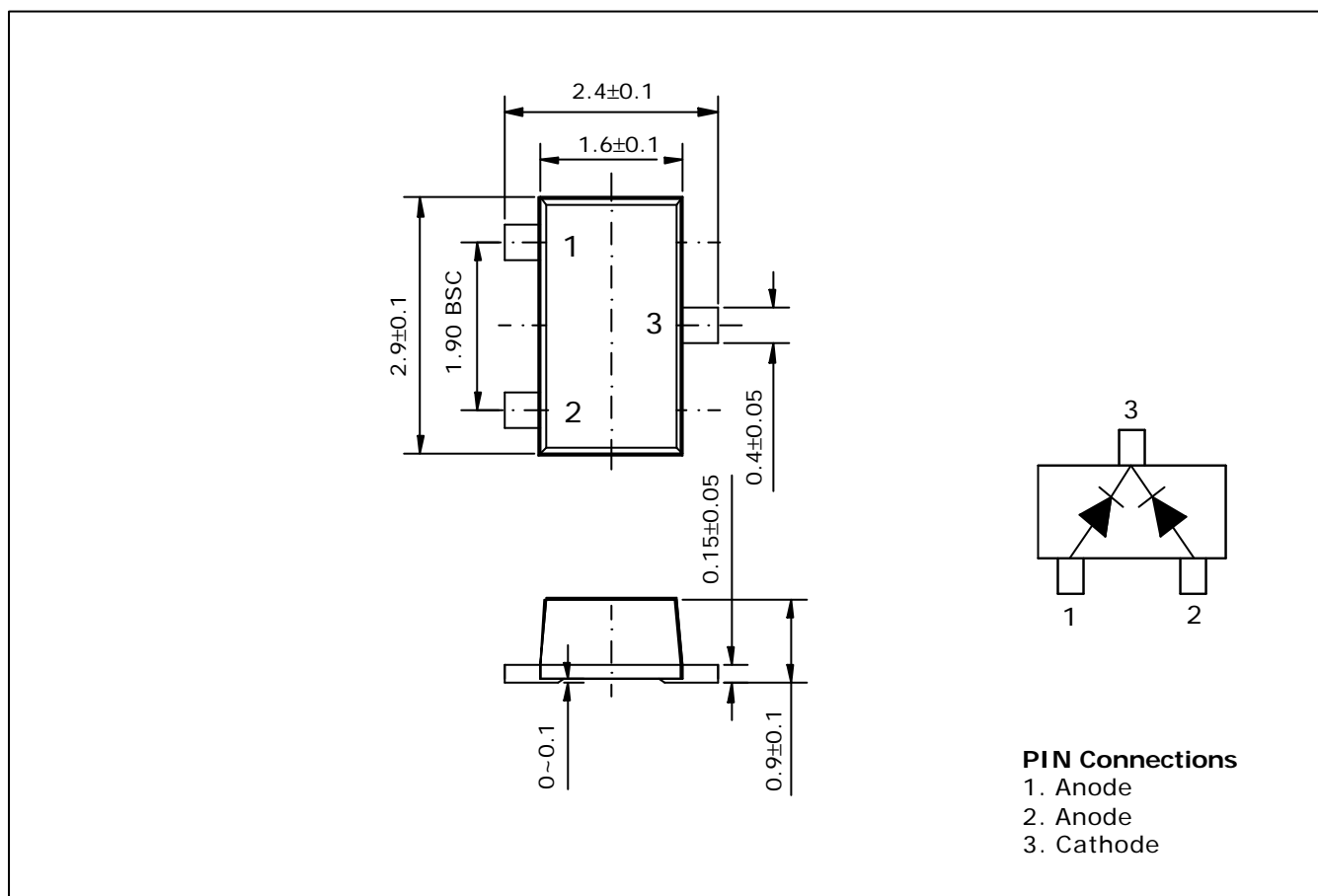
- Low capacitance : Max 0.5pF
- Low series resistance : $r_s = 3\Omega$ (Typ.) @ $I_F = 10\text{mA}$
- AGC and attenuator diode for VHF/UHF band tuner

Ordering Information

Type No.	Marking	Package Code
SDP530WAF	W3K	SOT - 23F

Outline Dimensions

unit : mm



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 × 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	$V_R=50V, f=1MHz$	-	-	0.5	pF
Series resistance	r_S	$I_F=0.1mA, f=100MHz$	-	130	-	Ω
		$I_F=1mA, f=100MHz$	-	17	-	Ω
		$I_F=10mA, f=100MHz$	-	3	-	Ω

Electrical Characteristic Curves

Fig. 1 $I_C - T_a$

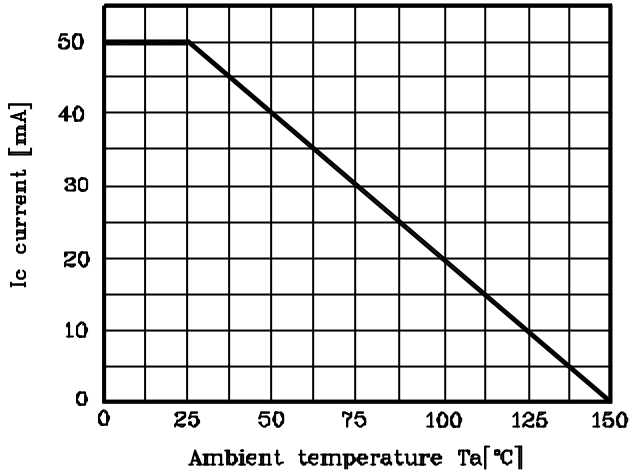


Fig. 2 $I_F - V_F$

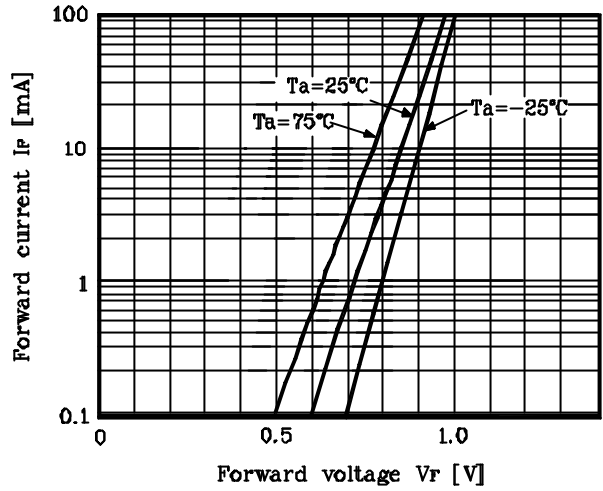


Fig. 3 $C_T - V_R$

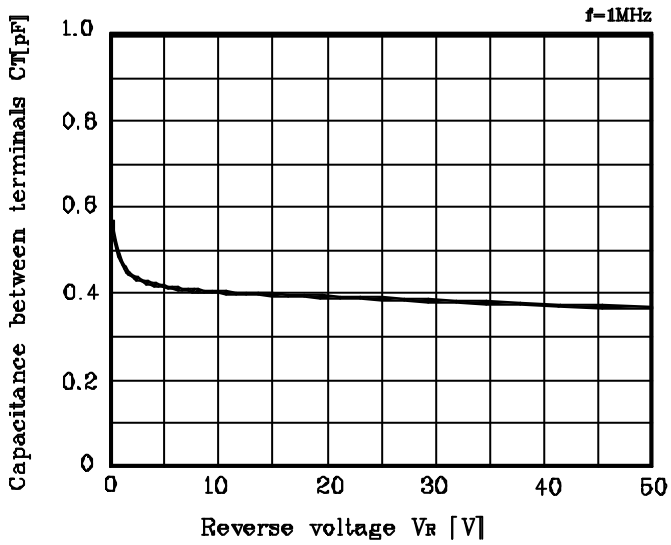


Fig. 4 $r_s - I_F$

