AUK Semiconductor

SDP520Q

Attenuator Diode

Features

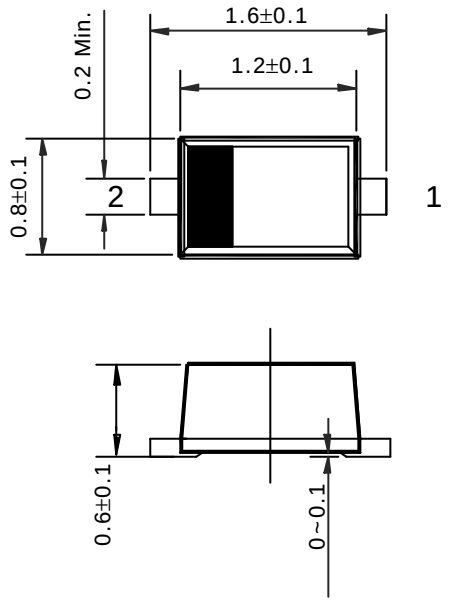
· SMD package : SOD-523
- Low capacitance : C_T=0.25pF(Typ.)
- Low series resistance : rs=7Ω(Typ.)
- VHF tuner band RF attenuator application
- AGC for FM tuner

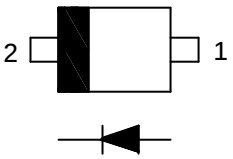
Ordering Information

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

Outline Dimensions

unit : mm





PIN Connections
1. Anode
2. Cathode

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=10μA	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

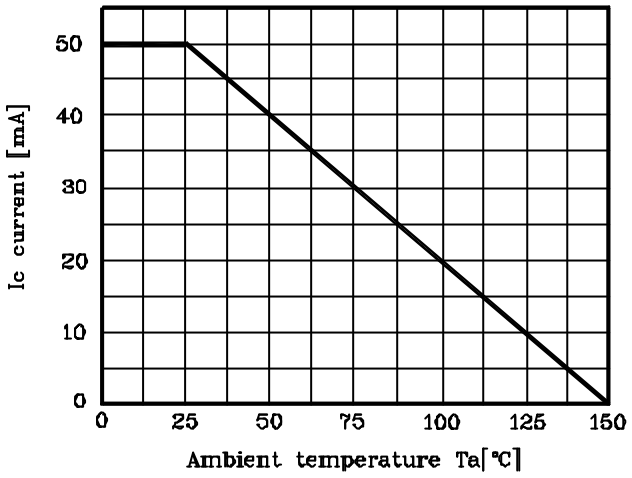


Fig. 2 I_F-V_F

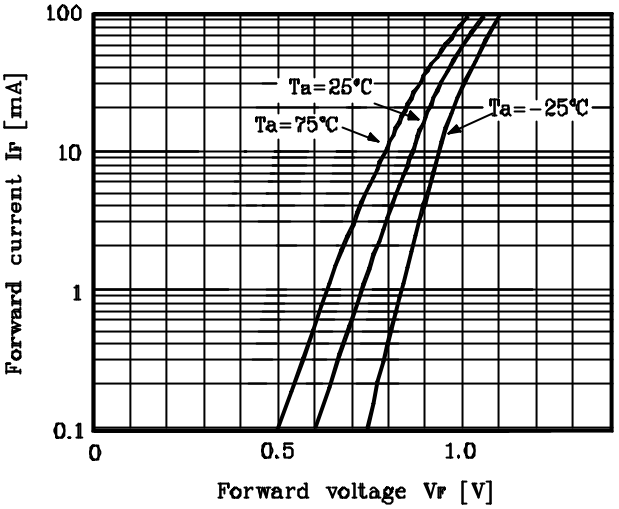


Fig. 3 C_T-V_R

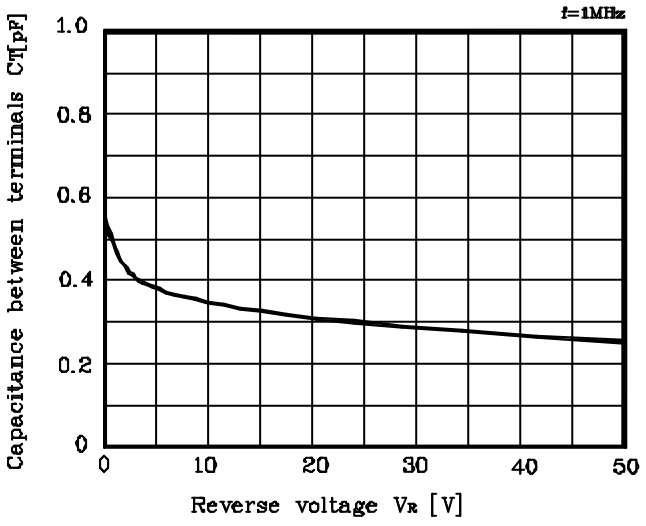


Fig. 4 r_S-I_F