

# **SDP520WMUF**

**Attenuator Diode** 

unit : mm

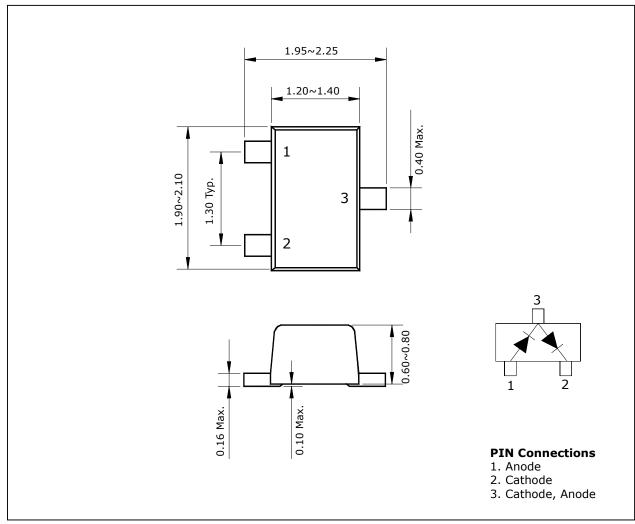
#### Features

- SMD package : SOT-323F
- Low capacitance :  $C_T=0.25pF(Typ.)$
- Low series resistance :  $rs=7\Omega(Typ.)$
- VHF tuner band RF attenuator application
- AGC for UHF/VHF Tuner

### **Ordering Information**

Type No.	Marking	Package Code		
SDP520WMUF	2M	SOT-323F		

### **Outline Dimensions**



## **SDP520WMUF**

### Absolute maximum ratings

Absolute maximum ratings				
Characteristic	ic Symbol Ratings		Unit	
Continuous reverse voltage	V <sub>R</sub>	50	V	
Forward current	$I_{F}^{*}$	50	mA	
Junction temperature	Tj	150	°C	
Storage temperature	T <sub>stg</sub>	-55 ~ 150	°C	

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

### **Electrical Characteristics**

Electrical Characteristics					Т	Ta=25°C	
Characteristic	Symbol	Test Condition	Min.	Тур.	Max.	Unit	
Reverse voltage	V <sub>R</sub>	$I_R = 10 \mu A$	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	0.5	pF	
Series resistance		I <sub>F</sub> =0.01mA, f=100MHz	-	2800	-	Ω	
	r	$I_F=0.1mA$ , f=100MHz	-	380	-	Ω	
	r <sub>s</sub>	I <sub>F</sub> =1mA, f=100MHz	-	45	-	Ω	
		I <sub>F</sub> =10mA, f=100MHz	-	7	-	Ω	

### **SDP520WMUF**

Fig. 1 I<sub>C</sub>-T<sub>a</sub>

50

40

30

20

10

0

0

Ic current [mA]

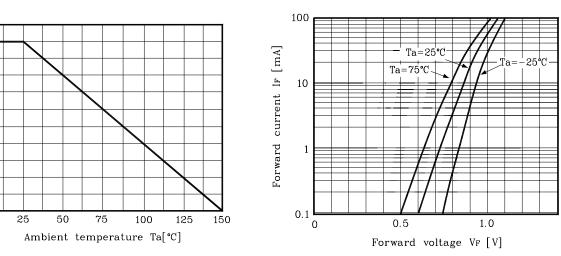
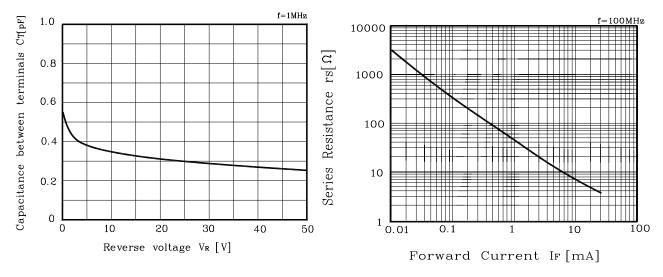




Fig. 4 r<sub>s</sub>-I<sub>F</sub>

Fig. 2 I<sub>F</sub>-V<sub>F</sub>



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