

## SK VARIABLE CAPACITANCE DIODE SILICON TYPE

### Application

- Frequency modulation in FM Radio
- FM and AFC in communication set

### Features

- Excellent linearity
- Capacitance ratio: $C_{0.5V}/C_{5.0V}=3.25$ (Typ)
- Low series resistance:  $r_s \leq 0.8\Omega$
- package: SOD-323



**SOD-323**

### Maximum ratings

Parameter	Symbol	Rating		Unit
		Min	Max	
Assignment Temperature Range	$T_{amb}$	-55	100	°C
Storage Temperature Range	$T_{atg}$	-55	125	°C
Maximum Reverse voltage	$V_{RM}$		6	V
Junction Temperature	$T_j$		125	°C
Forward voltage( $I_F=20mA$ )	$V_F$		1	V

### Electrical Characteristics(at $T_{amb}=25^\circ C$ )

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Diode capacitance	$C_1$	$VR_1=0.5V$	35	40	45	PF
Diode capacitance	$C_2$	$VR_2=5V$	10		20	PF
Capacitance ratio	$C_1/C_2$	$VR_1=0.5V, VR_2=5V$	1.2		5	
Reverse Current	$I_R$	$VR=6V$			10	nA
Forward Voltage	$V_F$	$I_F=20mA$			1	V
series resistance	$r_s$	$F=470MHz, C_0=14pF$			0.8	Ω

GRAPHICAL DATA

