1S2638

VARIABLE CAPACITANCE DIODE SILICON TYPE

Application

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



Features

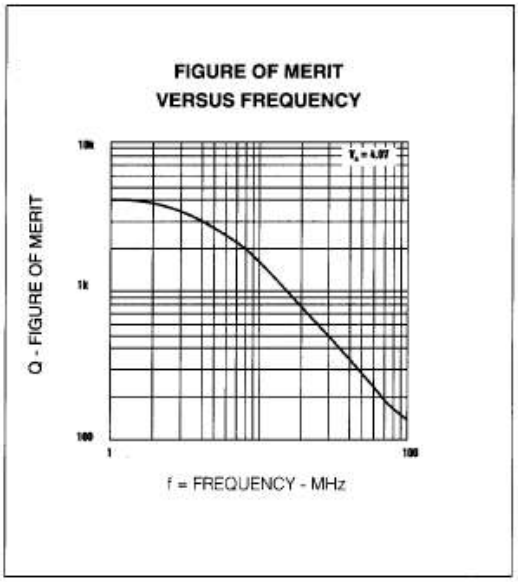
. Excellent linearity
. Low series resistance: rs≤0.8Ω
. package:SOD-323

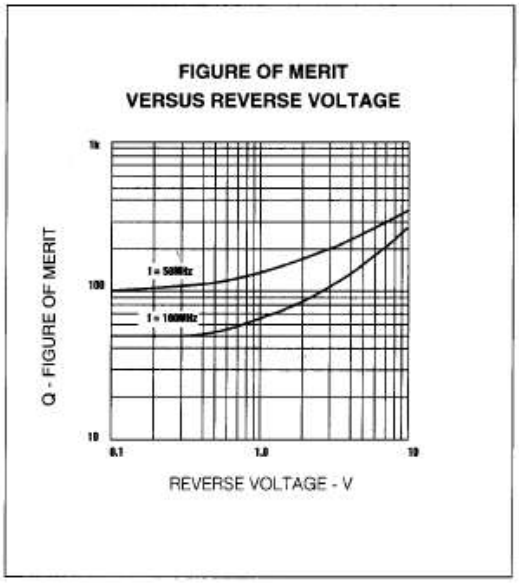
Maximum ratings

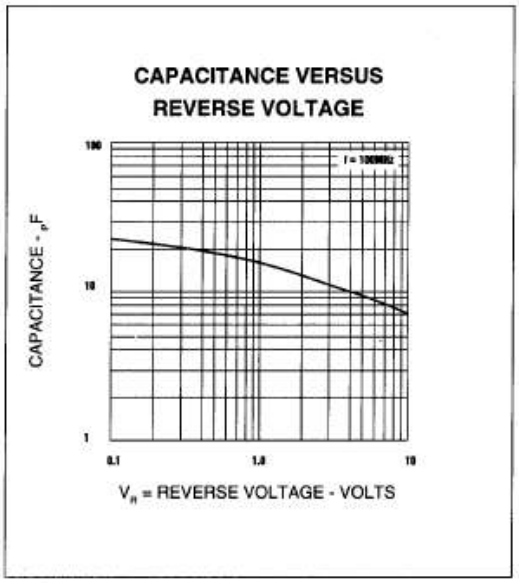
Parameter	Symbol	Rating		Unit
		Min	Max	
Assignment Temperature Range	T_{amb}	-55	100	℃
Storage Temperature Range	T_{atg}	-55	125	℃
Maximum Reverse voltage	V_{RM}		10	V
Junction Temperature	T_j		125	℃
Forward voltage(I_F=20mA)	V_F		1	V

Electrical Characteristics(at T_{amb}=25℃)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Diode capacitance	C_j	V_{R1}=4V	5	8	12	PF
Reverse Current	I_R	V_R=10V			100	nA
Forward Voltage	V_F	I_F=20mA			1	V
serises resistance	r_s	F=470MHz,C_0=14pF			0.8	Ω


FIGURE OF MERIT
VERSUS FREQUENCY
Q - FIGURE OF MERIT
f = FREQUENCY - MHz


FIGURE OF MERIT
VERSUS REVERSE VOLTAGE
Q - FIGURE OF MERIT
REVERSE VOLTAGE - V


CAPACITANCE VERSUS
REVERSE VOLTAGE
CAPACITANCE - pF
V = REVERSE VOLTAGE - VOLTS