



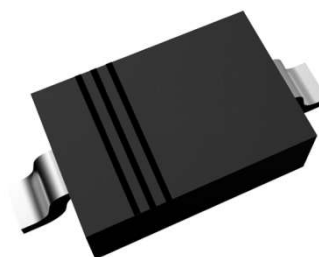
SK VARIABLE CAPACITANCE DIODE SILICON TYPE

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



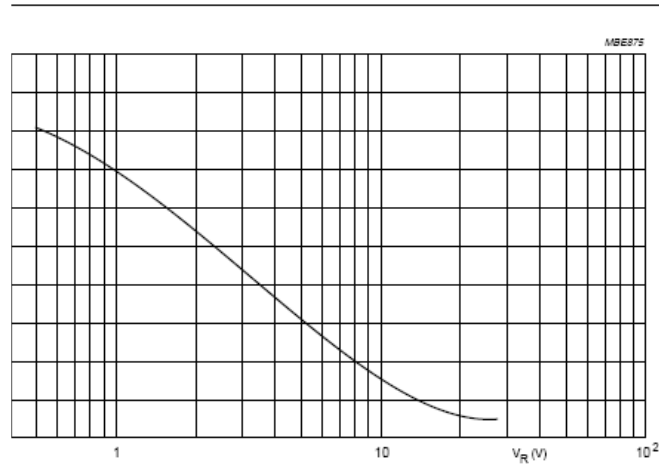
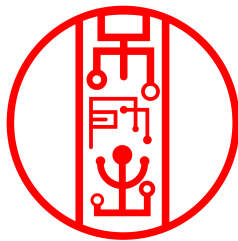
SOD-323

Maximum ratings

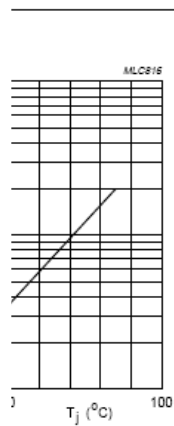
Parameter	Symbol	Rating		Unit
		Min	Max	
Assignment Temperature Range	T_{amb}	-55	100	°C
Storage Temperature Range	T_{atg}	-55	125	°C
Maximum Reverse voltage	V_{RM}		6	V
Junction Temperature	T_j		125	°C
Forward voltage($I_F=20mA$)	V_F		1	V

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

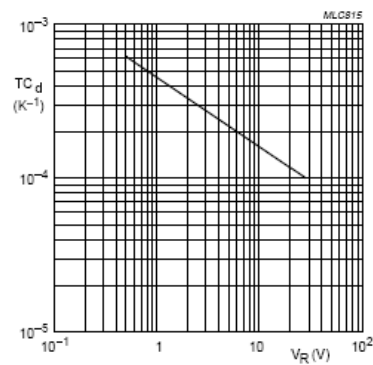
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Diode capacitance	C1	VR1=0.5V	35	40	45	PF
Diode capacitance	C2	VR2=5v	10		20	PF
Capacitance ratio	C1/C2	VR1=0.5V,VR2=5V	1.2		5	
Reverse Current	IR	VR=6V			10	nA
Forward Voltage	VF	IF=20mA			1	V
serises resistance	rs	F=470MHz,C0=14pF			0.8	Ω



diode capacitance as a function of reverse voltage; typical values.



diode capacitance as a function of junction temperature; typical values.



$T_J = 0 \text{ to } 85^\circ\text{C}$.

Fig.4 Temperature coefficient of diode capacitance as a function of reverse voltage; typical values.

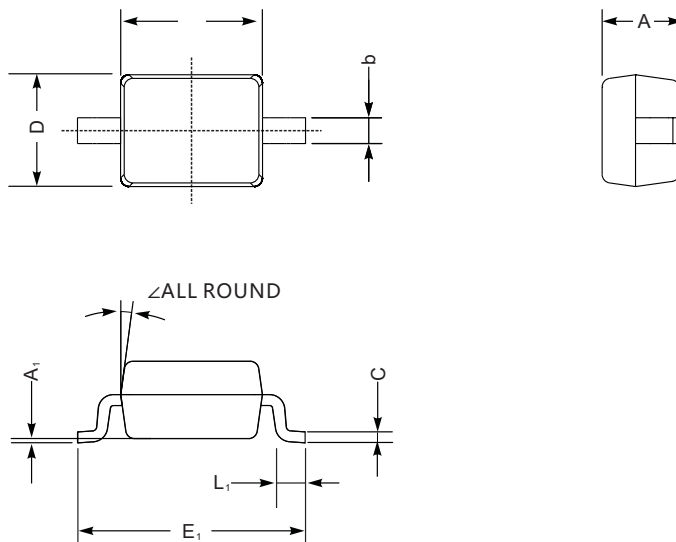


BB910

PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-323



SOD-323 mechanical data

UNIT		A	C	D	E	E ₁	b	L ₁	A ₁	∠
mm	max	1.1	0.15	1.4	1.8	2.75	0.4	0.45	0.2	9°
	min	0.8	0.08	1.2	1.4	2.55	0.25	0.2	—	
mil	max	43	5.9	55	70	108	16	16	8	
	min	32	3.1	47	63	100	9.8	7.9	—	

The recommended mounting pad size

