



BA592

Band Switching Diode Silicon Type

Features

- Small plastic SMD package
- Low diode capacitance
- Low diode forward resistance
- Small inductance

Application

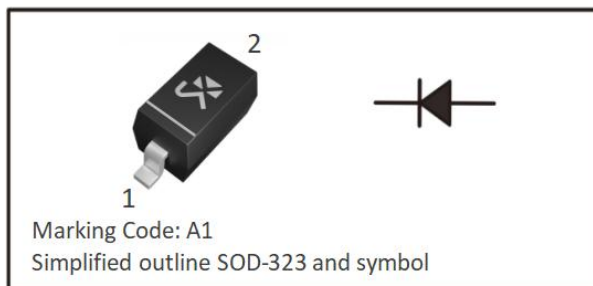
- Low loss band-switching in VHF television tuners
- Surface mount band-switching circuits

Maximum Ratings

Parameter	Symbol	Value	Unit
Continuous Reverse Voltage	V_R	35	V
Continuous Forward Current	I_F	100	mA
Total Power Dissipation@ $T_S=90^{\circ}\text{C}$	P_{tot}	500	mW
Storage Temperature	T_{STG}	$-65\sim+150$	$^{\circ}\text{C}$
Junction Temperature	T_J	$-65\sim+150$	$^{\circ}\text{C}$

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

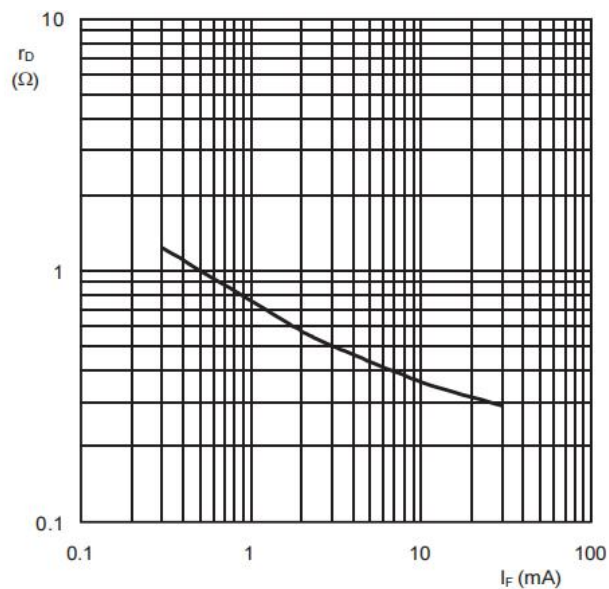


Electrical Characteristics@ $T_a = 25^{\circ}\text{C}$, unless specified otherwise

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward Voltage	V_F	$I_F=10\text{mA}$	-	-	1	V
Reverse Current	I_R	$V_R=20\text{V}$	-	-	20	nA
Diode Capacitance	C_d	$V_R=1\text{V}, f=1\text{MHz}$	-	0.92	1.4	pF
		$V_R=3\text{V}, f=1\text{MHz}$	0.6	0.85	1.1	pF
Diode Forward Resistance	r_D	$I_F=3\text{mA}, f=100\text{MHz}$	-	0.45	0.7	Ω
		$I_F=10\text{mA}, f=100\text{MHz}$	-	0.36	0.5	Ω
Reverse Resistance	$1/g_p$	$V_R=1\text{V}, f=100\text{MHz}$	-	100	-	k Ω
Series Inductance	L_s		-	2	-	nH

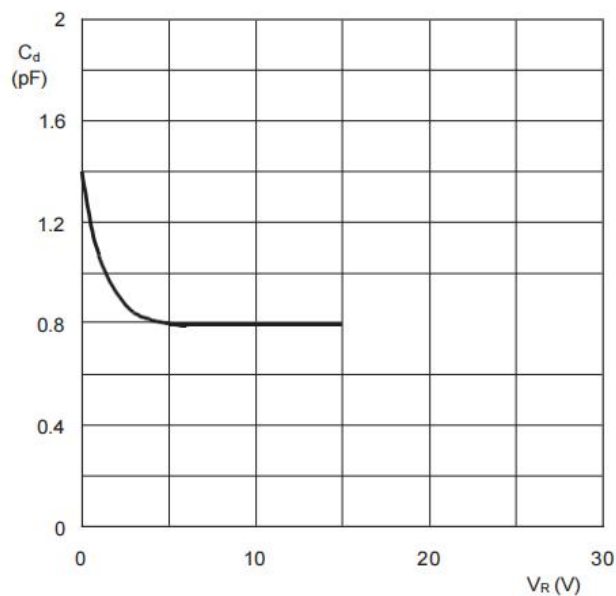


Typical Characteristics



$f = 100 \text{ MHz}$; $T_J = 25 \text{ }^\circ\text{C}$.

Fig.1 Forward resistance as a function of forward current; typical values.



$f = 1 \text{ MHz}$; $T_J = 25 \text{ }^\circ\text{C}$.

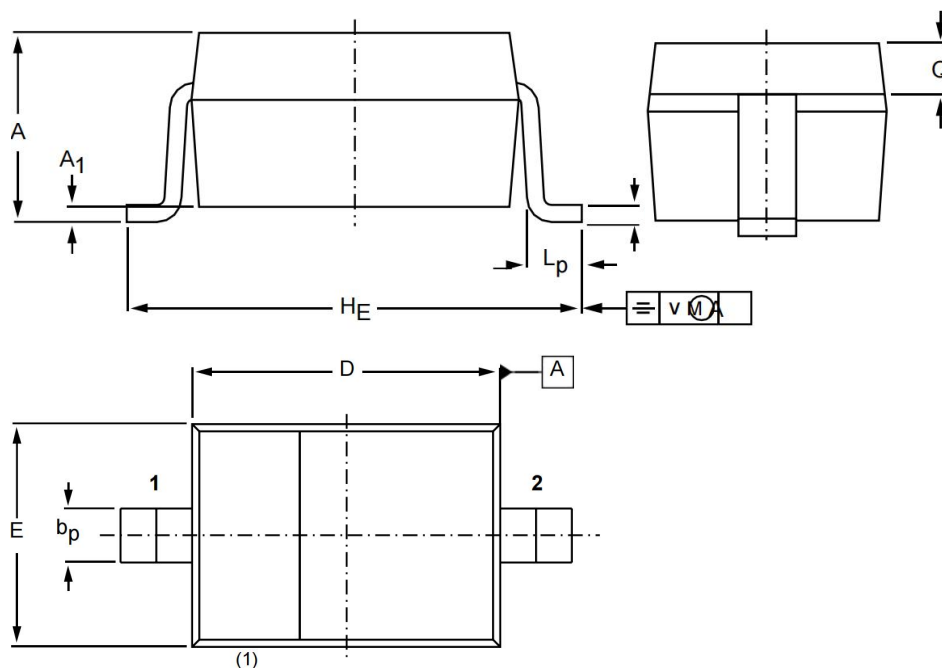
Fig.2 Diode capacitance as a function of reverse voltage; typical values.



Package Information

SOD-323

Dimensions in mm



Dimensions(mm are the original dimensions)

UNIT	A	A ₁ max.	b _p	c	D	E	H _E	L _p	Q	v
mm	1.1 0.8	+ 0.05 - 0.05	0.40 0.25	0.25 0.10	1.8 1.6	1.35 1.15	2.7 2.3	0.45 0.15	0.25 0.15	0.2

Note:(1).The marking band indicate the cathode



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