

Band Switching Diode

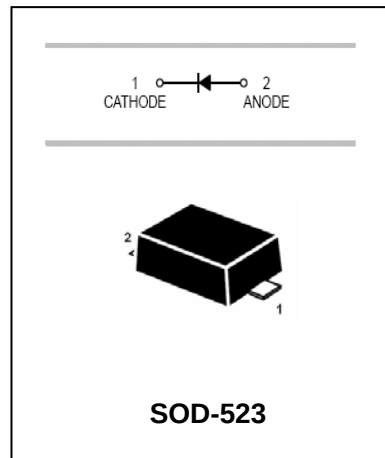
BA277

FEATURES

- Continuous reverse voltage: max. 35 V
- Continuous forward current: max. 100 mA
- Low diode capacitance: max. 1.2 pF
- Low diode forward resistance: max. 0.7 Ω .



Lead-free



APPLICATIONS

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

ORDERING INFORMATION

Type No.	Marking	Package Code
BA277	1	SOD-523

MAXIMUM RATING @ Ta=25°C unless otherwise specified

Parameter	Symbol	Limits	Unit
continuous forward voltage	V_R	35	V
continuous forward current	I_F	100	mA
Total power dissipation($T_S=90^\circ\text{C}$)	P_{tot}	715	mW
thermal resistance from junction to soldering-point	$R_{\text{thj-s}}$	85	K/W
Junction temperature	T_j	-65 to +125	$^\circ\text{C}$
Storage temperature	T_{stg}	-65 to +125	$^\circ\text{C}$

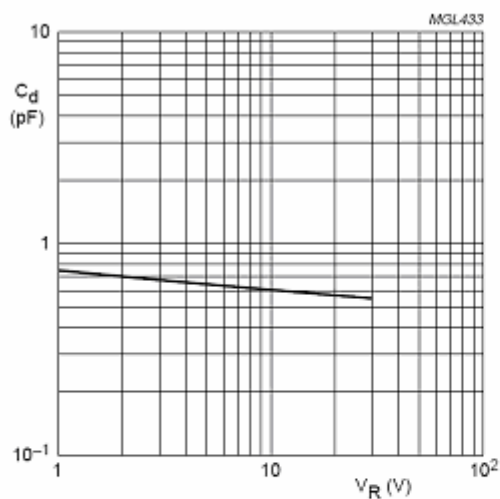
ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_F			1	V	$I_F=10\text{mA}$
Reverse current	I_R			50	nA	$V_R=25\text{V}$
				1	μA	$V_R=20\text{V}, T_{\text{amb}} = 75^\circ\text{C}$
Diode capacitance	C_d			1.2	pF	$V_R=6\text{V}, f=1\text{MHz}$
diode forward resistance	r_D			0.7	Ω .	$I_F=2\text{mA}, f=100\text{ MHz}$

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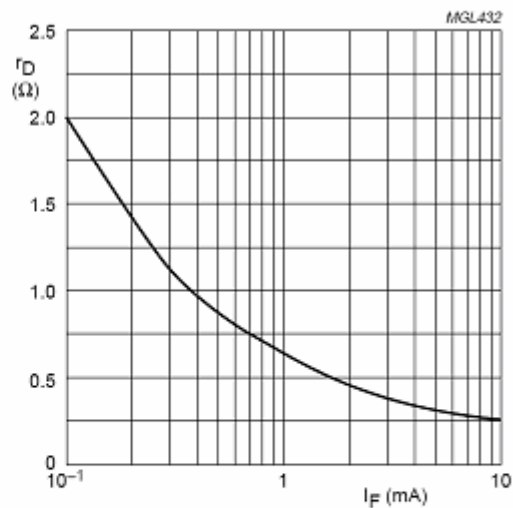
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TYPICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified



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

Fig.1 Diode capacitance as a function of reverse voltage; typical values.



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

Fig.2 Diode forward resistance as a function of forward current; typical values.

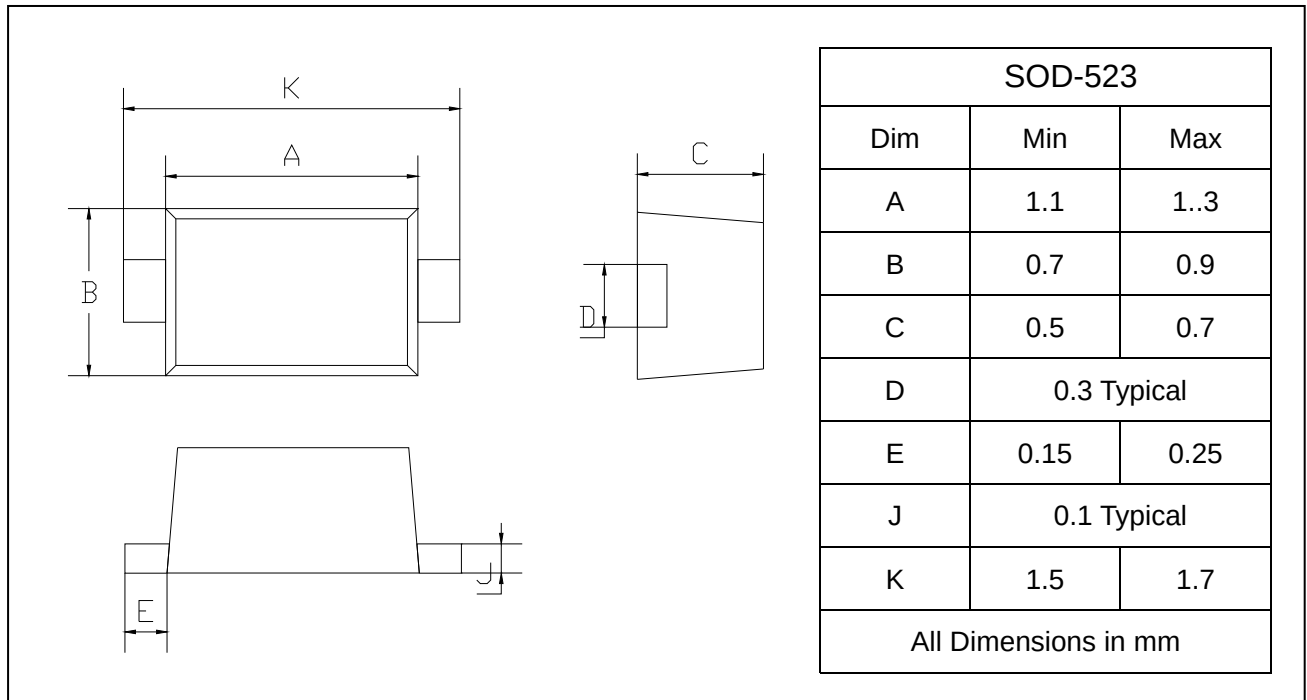
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BA277

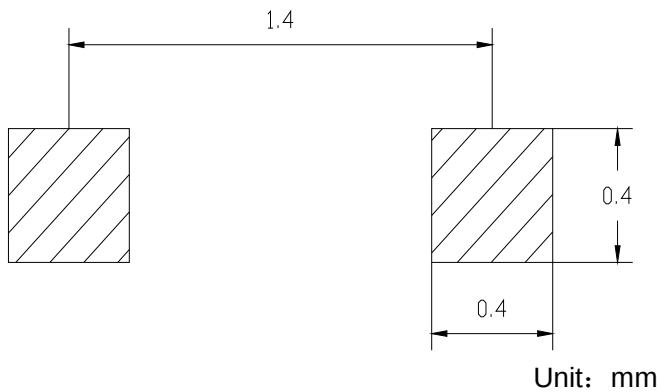
PACKAGE OUTLINE

Plastic surface mounted package

SOD-523



SOLDERING FOOTPRINT



PACKAGE INFORMATION

Device	Package	Shipping
BA277	SOD-523	3000/Tape&Reel