SILICON AM BAND SWITCHING DIODE FOR SURFACE MOUNTING

The BA423L is a switching diode intended for band switching in AM radio receivers.

This SM diode is a leadless diode in a hermetically sealed SOD-80 envelope with lead/tin plated metal discs at each end. It is suitable for "automatic placement" and as such it can withstand immersion soldering.

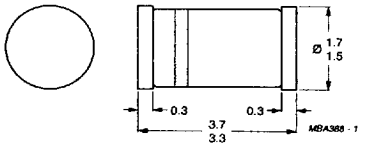
The diodes are delivered in "super 8" tape.

QUICK REFERENCE DATA

Continuous reverse voltage	V_R	max.	20 V
Forward current (DC)	I_F	max.	50 mA
Junction temperature	T_j	max.	150 °C
Diode capacitance at f = 1 MHz V_R = 3 V	C_d	<	2.5 pF
Series resistance at f = 1 MHz I_F = 10 mA	r_s	<	1.2 Ω

MECHANICAL DATA

Dimensions in mm



The cathode is indicated by a red band.

Fig. 1 SOD-80.

RATINGS

Limiting values in accordance with the Absolute Maximum System (IEC 134)

Continuous reverse voltage	V_R	max.	20 V
Forward current (DC)	I_F	max.	50 mA
Storage temperature range	T_{stg}		−65 to + 150 °C
Junction temperature	T_j	max.	150 °C

THERMAL RESISTANCE

From junction to ambient on a ceramic substrate of 8 mm x 10 mm x 0.7 mm (see soldering recommendations SOD-80)	$R_{th\ j\text{-}a}$	max.	400 K/W

CHARACTERISTICS

T_j = 25 °C unless otherwise specified

Forward voltage			
I_F = 50 mA	V_F	<	0.9 V
Reverse current			
V_R = 20 V	I_R	<	100 nA
V_R = 20 V; T_j = 125 °C		<	5.0 μA
Diode capacitance at f = 1 MHz			
V_R = 3 V	C_d	<	2.5 pF
Series resistance at f = 1 MHz			
I_F = 10 mA	r_s	<	1.2 Ω

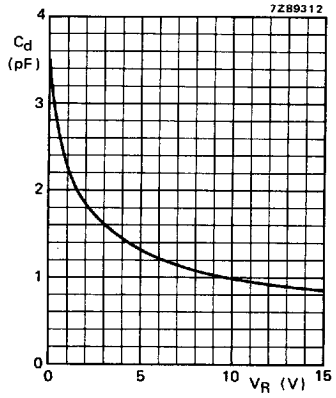


Fig. 2 Diode capacitance as a function of continuous reverse voltage; f = 1 MHz; T_j = 25 °C; typical values.

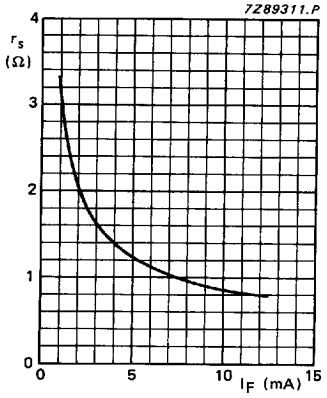


Fig. 3 Series resistance as a function of forward current; f = 1 MHz; T_j = 25 °C; typical values.