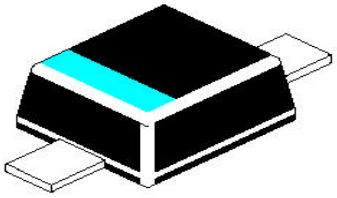
Continental Device India Limited
An ISO/TS 16949, ISO 9001 and ISO 14001 Certified Company

HIGH VOLTAGE SWITCHING DIODE

BAS521

SOD- 523
Formed SMD Package



Marking:- with cathode band

BAS521 – L4

High Speed and High Voltage Switching Diode

ABSOLUTE MAXIMUM RATINGS

DESCRIPTION	SYMBOL	VALUE	UNIT
Continuous Reverse Voltage	V_R	300	V
Repetitive Peak Reverse Voltage	V_{RRM}	300	V
Continuous Forward Current $T_s \leq 90$ °C	*I_F	250	mA
Repetitive Peak Forward Voltage t_P = 1ms; d = 0.25	I_{FRM}	1.0	A
Non Repetitive Peak Forward Current tp=1ms, Square wave, T_j=25°C Prior to Surge	I_{FSM}	4.5	A
Total Power Dissipation T_s=90°C	*p_{tot}	500	mW
Storage Temperature	T_{stg}	- 65 to +150	°C
Junction Temperature	T_j	150	°C
Operating Ambient Temperature	T_{amb}	- 65 to +150	°C

THERMAL RESISTANCE

Junction to Solder Point	**$R_{th\ (j-s)}$	120	K/W
Junction to Ambient in free air	$R_{th\ (j-a)}$	500	K/W

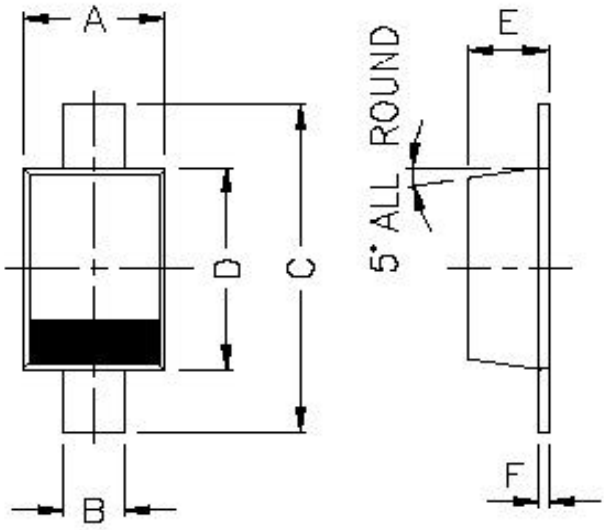
***T_s is the temperature at the soldering point of the cathode tab, ** Soldering point of the Cthode tab.**

ELECTRICAL CHARACTERISTICS (T_a=25° C unless specified otherwise)

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	MAX	UNIT
Breakdown Voltage	V_{BR}	I_R=100µA	300		V
Forward Voltage	***V_F	I_F=100mA		1.1	V
Reverse Current	I_R	V_R=250V		0.15	µA
		V_R=250V, T_a=150°C		100	µA
Reverse Recovery Time, when Switched from I_F=30mA to I_R=30mA, R_L=100W, measured at I_R=3mA	t_{rr}	I_F=5mA		50	ns
Diode Capacitance	C_d	V_R=0V, f=1MHz		5.0	pF

***Pulse test:- tp=300µ s; d =0.02**

PACKAGE SOD–523 FL



DIM	MIN.	MAX.
A	0.75	0.85
B	0.3	0.4
C	1.55	1.65
D	1.15	1.25
E	0.60	0.70
F	0.127	0.135

Cathode is marked by Band
All dimensions are in mm

Component Disposal Instructions

1. CDIL Semiconductor Devices are RoHS compliant, customers are requested to please dispose as per prevailing Environmental Legislation of their Country.

2. In Europe, please dispose as per EU Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE).

Disclaimer

CDIL is a registered Trademark of
Continental Device India Limited
C-120 Naraina Industrial Area, New Delhi 110 028, India.
Telephone + 91-11-2579 6150, 4141 1112 Fax + 91-11-2579 5290, 4141 1119
email@cdil.com www.cdilsemi.com