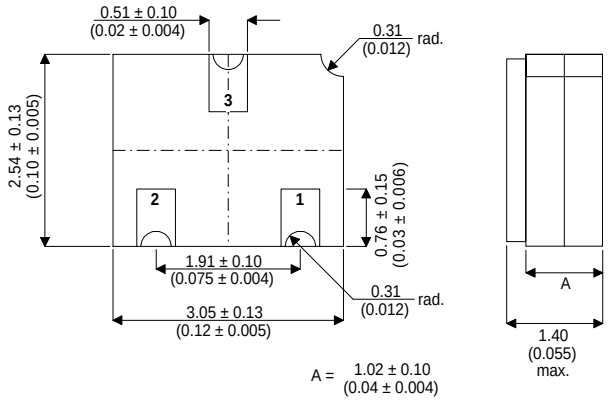
BCX17CSM

GENERAL PURPOSE PNP TRANSISTOR IN A HERMETICALLY SEALED CERAMIC SURFACE MOUNT PACKAGE FOR HIGH RELIABILITY APPLICATIONS

MECHANICAL DATA
Dimensions in mm (inches)



SOT23 CERAMIC (LCC1 PACKAGE)

Underside View

PAD 1 – Base PAD 2 – Emitter PAD 3 – Collector

V_{CEO} = 45V

I_C = 500mA

FEATURES

- **SILICON PLANAR EPITAXIAL PNP TRANSISTOR**
- **HERMETIC CERAMIC SURFACE MOUNT PACKAGE (SOT23 COMPATIBLE)**
- **CECC SCREENING OPTIONS**
- **SPACE QUALITY LEVELS OPTIONS**

ABSOLUTE MAXIMUM RATINGS (T_{case} = 25°C unless otherwise stated)

V_{CBO}	Collector - Base Voltage	–50V
V_{CEO}	Collector - Emitter Voltage	–45V
V_{EBO}	Emitter - Base Voltage	–5V
I_C	Collector Current	500mA
P_D	Total Device Dissipation	350mW
P_D	Derate above 50°C	2.0mW / °C
R_{ja}	Thermal Resistance Junction to Ambient	350°C / W
T_{stg}, T_j	Storage Temperature, Operating Temp Range	–55 to 200°C

Semelab plc. Telephone +44(0)1455 556565. Fax +44(0)1455 552612.
E-mail: sales@semelab.co.uk Website: http://www.semelab.co.uk

BCX17CSM

ELECTRICAL CHARACTERISTICS (T_{case} = 25°C unless otherwise stated)

	Parameter	Test Conditions		Min.	Typ.	Max.	Unit
V_{CES*}	Collector – Emitter Sustaining Voltage	V_{BE} = 0		–50			V
V_{CEO*}	Collector – Base Voltage	I_C = 10mA		–45			
V_{EBO*}	Emitter – Base Breakdown Voltage	I_E = 10µA	I_C = 0	–5			
I_{CBO*}	Collector – Base Cut-off Current	I_E = 0	V_{CB} = –20V			100	nA
		T_C = 150°C				5	µA
I_{EBO*}	Emitter Base Cut-off Current	V_{BE} = 0.5V	I_C = 0			10	µA
$V_{CE(sat)*}$	Collector – Emitter Saturation Voltage	I_C = 500mA	I_B = 50mA			0.62	V
$V_{BE(sat)*}$	Base – Emitter Saturation Voltage	I_C = 500mA	I_B = 50mA			1.2	
h_{FE*}	DC Current Gain	I_C = 100mA	V_{CE} = 1V	100		600	—
		I_C = 300mA	V_{CE} = 1V	70			
		I_C = 500mA	V_{CE} = 1V	40			

* Pulse test t_p = 300µs , $\delta \leq 2\%$

DYNAMIC CHARACTERISTICS (T_{case} = 25°C unless otherwise stated)

	Parameter	Test Conditions			Min.	Typ.	Max.	Unit
f_T	Transition Frequency	I_C = 10mA	V_{CE} = 5V	f = 35MHz		100		MHz
C_{ob}	Output Capacitance	V_{CB} = 10V	I_E = 0	f = 1.0MHz		8		pF

littlediode
COMPONENTS FOR ALL

Littlediode supplies new, hard to find or obsolete electronic components and semiconductors all over the world.

With over two million different components listed you are sure to find the part you need.

Feel free to visit us today at our online store:

LittleDiode.com

Looking forward to providing you with the best possible service.