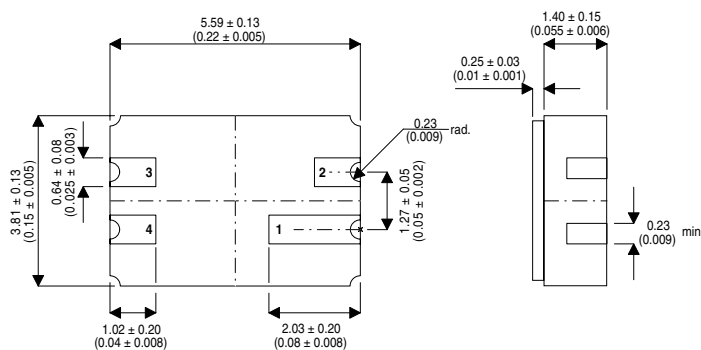


MECHANICAL DATA

Dimensions in mm (inches)

SILICON PLANAR NPN HIGH VOLTAGE TRANSISTOR IN A CERAMIC SURFACE MOUNT PACKAGE



FEATURES

- High Voltage
- Ceramic Surface Mount
- Screening Options Available

LCC3

PAD 1 = COLLECTOR PAD 3 = EMITTER
PAD 2 = N/C PAD 4 = BASE

ABSOLUTE MAXIMUM RATINGS

V _{CBO}	Collector - Base Voltage (I _E = 0)	160V
V _{CEO}	Collector - Emitter Voltage (I _B = 0)	160V
V _{EBO}	Emitter Base Voltage (I _C = 0)	5V
I _C	Collector Current	100mA
I _{CM}	Collector Peak Current	200mA
P _{tot}	Total Power Dissipation at T _{case} ≤ 50°C	5W
T _{stg}	Storage Temperature	-55 to 200°C
T _j	Junction Temperature	200°C

Semelab Plc reserves the right to change test conditions, parameter limits and package dimensions without notice. Information furnished by Semelab is believed to be both accurate and reliable at the time of going to press. However Semelab assumes no responsibility for any errors or omissions discovered in its use. Semelab encourages customers to verify that datasheets are current before placing orders.

Thermal Data

$R_{th\ j-case}$	Thermal resistance junction - case	max	30°C/W
$R_{th\ j-amb}$	Thermal resistance junction - ambient	max	175°C/W

Electrical Characteristics ($T_{amb} = 25^{\circ}C$ Unless otherwise specified)

Parameter	Test Conditions	Min.	Typ.	Max.	Unit
$V_{(BR)CEO}^*$	Collector–Emitter Breakdown Voltage $I_C = 10mA$ $I_B = 0$	160			V
$V_{(BR)CBO}$	Collector – Base Breakdown Voltage $I_C = 100\mu A$ $I_E = 0$	160			
$V_{(BR)EBO}$	Emitter - Base Breakdown Voltage $I_C = 0$ $I_E = 100\mu A$	5			
I_{CBO}	Collector Cutoff Current $V_{CB} = 100V$ $I_E = 0$			50	nA
$V_{CE(sat)}^*$	Collector – Emitter Saturation Voltage $I_C = 30mA$ $I_B = 6mA$			1	V
h_{FE}^*	DC Current Gain $I_C = 30mA$ $I_B = 10V$	25			—
f_t	Transition Frequency $I_C = 15mA$ $V_{CE} = 10V$		90		MHz
C_{re}	Reverse Capacitance $I_C = 0$ $V_{CE} = 30V$ $f = 1MHz$		3		pF

* Pulsed test $t_p = 300\mu s$, $\delta = 1\%$

Semelab Plc reserves the right to change test conditions, parameter limits and package dimensions without notice. Information furnished by Semelab is believed to be both accurate and reliable at the time of going to press. However Semelab assumes no responsibility for any errors or omissions discovered in its use. Semelab encourages customers to verify that datasheets are current before placing orders.

Semelab plc. Telephone +44(0)1455 556565. Fax +44(0)1455 552612.

E-mail: sales@semelab.co.uk

Website: <http://www.semelab.co.uk>

Document Number 2666
Issue 1