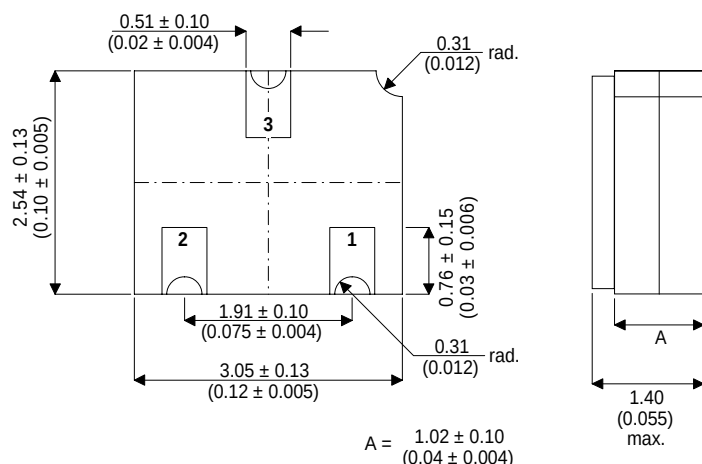


MECHANICAL DATA

Dimensions in mm (inches)



LCC1

Underside View

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

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

FEATURES

- High Voltage Switching
- Low Power Amplifier Applications
- Hermetic Ceramic Surface Mount Package

APPLICATIONS:

- CECC Screening Options
- Space Quality Levels Options.

ABSOLUTE MAXIMUM RATINGS ($T_{case} = 25^{\circ}C$ unless otherwise stated)

V_{CEO}	Collector – Emitter Voltage	-175V
V_{CBO}	Collector – Base Voltage	-175V
V_{EBO}	Emmitter – Base Voltage	-5V
I_C	Collector Current	-1A
P_D	Total Device Dissipation @ $T_A = 25^{\circ}C$	500mW
T_J, T_{STG}	Operating and Storage Junction Temperature Range	-65 to +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.

ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ unless otherwise stated)

Parameter		Test Conditions		Min.	Typ.	Max.	Unit
OFF CHARACTERISTICS							
BV _{CEO}	Collector–Emitter Breakdown Voltage ¹	I _C = -10mA	I _B = 0	-175			V
BV _{CBO}	Collector – Base Breakdown Voltage	I _C = -100μA	I _E = 0	-175			
BV _{EBO}	Emitter – Base Breakdown Voltage	I _C = 0	I _E = -10μA	-5.0			
I _{EBO}	Emitter Cut-off Current	V _{BE} = -3.0V	I _C = 0			-50	nA
I _{CBO}	Collector Cut-off Current	V _{CB} = -100V	I _E = 0			-100	
ON CHARACTERISTICS							
h _{FE}	DC Current Gain	I _C = -0.1mA	V _{CE} = -10V	80			–
		I _C = -1.0mA	V _{CE} = -10V	90			
		I _C = -10mA	V _{CE} = -10V	100			
		I _C = -50mA	V _{CE} = -10V	100		300	
		I _C = -150mA	V _{CE} = -10V	50			
V _{CE(sat)}	Collector – Emitter Saturation Voltage ¹	I _C = -10mA	I _B = -1.0mA			-0.3	V
		I _C = -50mA	I _B = -5mA			-0.5	
V _{BE(sat)}	Base – Emitter Saturation Voltage	I _C = -10mA	I _B = -1.0mA			-0.8	V
		I _C = -50mA	I _B = -5mA	-0.65		-0.9	
SMALL SIGNAL CHARACTERISTICS							
f _t	Current Gain Bandwidth Product	V _{CE} = -30V	I _C = -30mA f = 100MHz	100			MHz
C _{ob}	Output Capacitance	V _{CB} = -20V	I _E = 0 f = 100kHz			10	pF
C _{ib}	Input Capacitance	V _{BE} = 1.0V	I _C = 0 f = 100kHz			75	pF
h _{ie}	Input Impedance	V _{CE} = -10V	I _C = -10mA f = 1.0kHz	200		1200	Ω
h _{re}	Voltage Feedback Ratio					3.0	x10 ⁻⁴
h _{fe}	Small Signal Current Gain				80	320	—
h _{oe}	Output Admittance					200	μmhos
NF		V _{CE} = -10V R _S = 1.0Ω	I _C = -0.5mA f = 1.0kHz			3.0	dB
SWITCHING CHARACTERISTICS							
t _{on}	Turn–On Time	V _{CC} = -100V	V _{BE} = 4.0V			400	ns
t _{off}	Turn–Off Time	I _C = -50mA	I _{B1} = I _{B2} = -5mA			600	

1) Pulse test : Pulse Width < 300 μs ,Duty Cycle < 2%

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