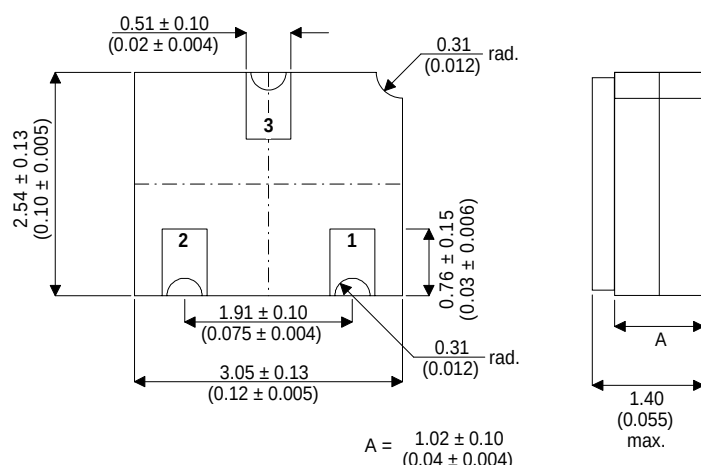


MECHANICAL DATA

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	140V
V_{CBO}	Collector – Base Voltage	140V
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

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	140			V
BV _{CBO}	Collector – Base Breakdown Voltage	I _C = 100μA	I _E = 0	140			
BV _{EBO}	Emitter – Base Breakdown Voltage	I _C = 0	I _E = 10μA0	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	40			–
		I _C = 1mA	V _{CE} = 10V	45			
		I _C = 10mA	V _{CE} = 10V	50			
		I _C = 50mA	V _{CE} = 10V	50		150	
		I _C = 150mA	V _{CE} = 10V	25			
V _{CE(sat)}	Collector – Emitter Saturation Voltage ¹	I _C = 10mA	I _B = 1mA			0.3	V
		I _C = 50mA	I _B = 5mA			0.5	
V _{BE(sat)}	Base – Emitter Saturation Voltage	I _C = 10mA	I _B = 1mA			0.8	V
		I _C = 50mA	I _B = 5mA	.65		0.9	
SMALL SIGNAL CHARACTERISTICS							
f _t	Current Gain Bandwidth Product	V _{CE} = 30V	I _C = 50mA f = 100MHz	150			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 = 1kHz	100		600	Ω
h _{re}	Voltage Feedback Ratio					3.0	x10 ⁻⁴
h _{fe}	Small Siganl Current Gain				40	160	—
h _{oe}	Ourput Admittance					200	μmhos
NF		V _{CE} = 10V R _S = 1.0Ω	I _C = 0.5mA f = 1kHz			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%