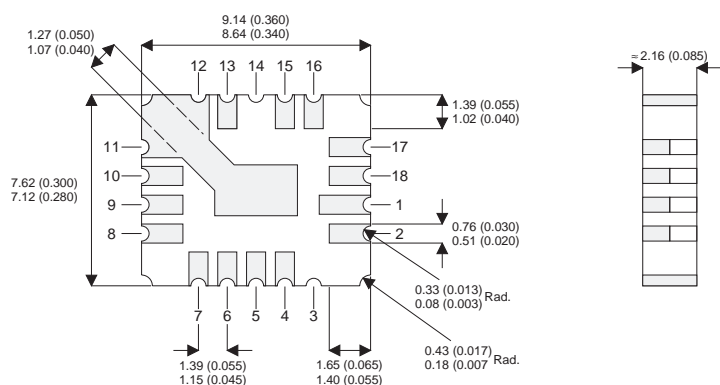


**MECHANICAL DATA**

Dimensions in mm (inches)

**PNP SILICON TRANSISTORS**



**FEATURES**

- Hermetically sealed ceramic surface mount package
- Small footprint
- Simple drive requirements

**LCC4 CERAMIC SURFACE MOUNT PACKAGE**

**Underside View**

- Pads 6, 7, 8, 9, 10, 11, 12, 13. **Emitter**
- Pads 4,5 **Base**
- Pads 1,2,15,16,17,18 **Collector**
- Pads 3,14 **Not Connected**

**ABSOLUTE MAXIMUM RATINGS**  $T_{CASE} = 25^{\circ}C$  unless otherwise stated

$V_{CBO}$	Collector – Base Voltage ( $I_E = 0$ )	100V
$V_{CEO}$	Collector – Emitter Voltage ( $I_B = 0$ )	100V
$V_{EBO}$	Emitter – Base Voltage ( $I_C = 0$ )	6V
$I_C$	Collector Current	5A
$I_B$	Base Current	1A
$P_{tot}$	Total Dissipation at $T_{amb} \leq 25^{\circ}C$	1W
	derate above $25^{\circ}C$	5.71mW/ $^{\circ}C$
$P_{tot}$	Total Dissipation at $T_{amb} \leq 25^{\circ}C$	10W
	derate above $25^{\circ}C$	57.1mW/ $^{\circ}C$
$T_{stg}$	Storage Temperature Range	-55 to +200 $^{\circ}C$
$T_j$	Junction temperature	200 $^{\circ}C$

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** ( $T_{\text{case}} = 25^{\circ}\text{C}$  unless otherwise stated)

Parameter	Test Conditions	Min.	Typ.	Max.	Unit
$V_{(\text{BR})\text{CEO}}$	Collector Emitter Breakdown Voltage $I_{\text{C}} = 50\text{mA}$ pulsed	100			V
$I_{\text{CBO}}$	Collector-Base Cut Off Current $I_{\text{E}} = 0$ $V_{\text{CB}} = 100\text{V}$			10	$\mu\text{A}$
$I_{\text{CEX}}$	Collector-Emitter Cut Off Current $V_{\text{BE}} = 1.5\text{V}$ $V_{\text{CE}} = 90\text{V}$ $T_{\text{A}} = 150^{\circ}\text{C}$			10 1	$\mu\text{A}$ mA
$I_{\text{CEO}}$	Collector-Emitter Cut Off Current $I_{\text{B}} = 0$ $V_{\text{CE}} = 100\text{V}$			100	$\mu\text{A}$
$I_{\text{EBO}}$	Collector-Emitter Cut Off Current $V_{\text{EB}} = 6\text{V}$ $I_{\text{C}} = 0$			100	$\mu\text{A}$
$V_{\text{CE(sat)}}$	Collector Emitter Saturation Voltage $I_{\text{C}} = 2\text{A}$ $I_{\text{B}} = 0.2\text{A}$ $I_{\text{C}} = 5\text{A}$ $I_{\text{B}} = 0.5\text{A}$			0.7 1.2	V
$V_{\text{BE(sat)}}$	Base Emitter Voltage $I_{\text{C}} = 2\text{A}$ $I_{\text{B}} = 0.2\text{A}$ $I_{\text{C}} = 5\text{A}$ $I_{\text{B}} = 0.5\text{A}$			1.2 1.8	
$h_{\text{FE}}$	DC Current Gain $I_{\text{C}} = 0.5\text{A}$ $V_{\text{CE}} = 2\text{V}$ $I_{\text{C}} = 2\text{A}$ $V_{\text{CE}} = 2\text{V}$ $T_{\text{C}} = -55^{\circ}\text{C}$ $I_{\text{C}} = 5\text{A}$ $V_{\text{CE}} = 2\text{V}$	60 60 12 30		240	
$ h_{\text{fe}} $	Magnitude of Common Emitter Small Signal Short circuit forward Current Transfer ratio. $V_{\text{CB}} = 5\text{V}$ $I_{\text{C}} = 0.5\text{A}$ $f = 10\text{MHz}$	3.0		15	
$C_{\text{IBO}}$	Input Capacitance, Output Open Circuited $V_{\text{CB}} = 10\text{V}$ $I_{\text{E}} = 0$ $100\text{kHz} < f < 1\text{MHz}$			1250	pF
$C_{\text{OBO}}$	Open Circuit Output Capacitance $V_{\text{CB}} = 10\text{V}$ $I_{\text{E}} = 0$ $100\text{kHz} < f < 1\text{MHz}$			300	