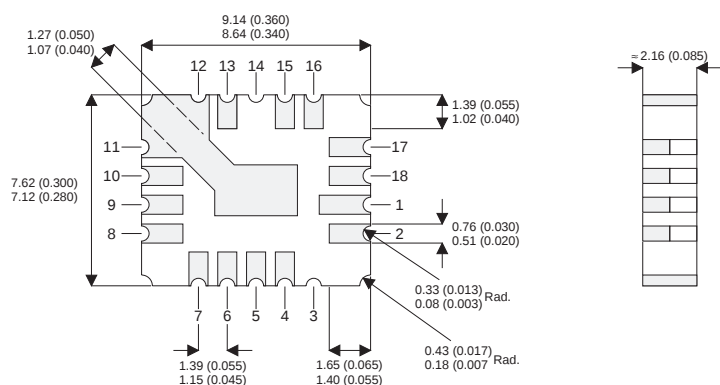


MECHANICAL DATA

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	$I_C = 50\text{mA}$ pulsed	100			V
I_{CBO} Collector-Base Cut Off Current	$I_E = 0$ $V_{\text{CB}} = 100\text{V}$			10	μA
I_{CEX} Collector-Emitter Cut Off Current	$V_{\text{BE}} = 1.5\text{V}$ $V_{\text{CE}} = 90\text{V}$ $T_A = 150^{\circ}\text{C}$			10 1	μA mA
I_{CEO} Collector-Emitter Cut Off Current	$I_B = 0$ $V_{\text{CE}} = 100\text{V}$			100	μA
I_{EBO} Collector-Emitter Cut Off Current	$V_{\text{EB}} = 6\text{V}$ $V_{\text{EB}} = 5.5\text{V}$ $I_C = 0$			100 1.0	μA mA
$V_{\text{CE(sat)}}$ Collector Emitter Saturation Voltage	$I_C = 2\text{A}$ $I_B = 0.2\text{A}$ $I_C = 5\text{A}$ $I_B = 0.5\text{A}$			0.7 1.2	V
$V_{\text{BE(sat)}}$ Base Emitter Voltage	$I_C = 2\text{A}$ $I_B = 0.2\text{A}$ $I_C = 5\text{A}$ $I_B = 0.5\text{A}$			1.2 1.8	V
h_{FE} DC Current Gain	$I_C = 0.5\text{A}$ $V_{\text{CE}} = 2\text{V}$ $I_C = 2\text{A}$ $V_{\text{CE}} = 2\text{V}$ $I_C = 5\text{A}$ $V_{\text{CE}} = 2\text{V}$ $I_C = 2\text{A}$ $V_{\text{CE}} = 2\text{V}$ $T_C = -55^{\circ}\text{C}$	60 60 30 12		240	—
$ h_{\text{fe}} $ Magnitude of Common Emitter Small Signal Short circuit forward Current Transfer ratio.	$V_{\text{CB}} = 5\text{V}$ $I_C = 0.5\text{A}$ $f = 10\text{MHz}$	3.0		15	
C_{IBO} Input Capacitance, Output Open Circuited	$V_{\text{CB}} = 10\text{V}$ $I_E = 0$ $100\text{kHz} < f < 1\text{MHz}$			1250	pF
C_{OBO} Open Circuit Output Capacitance	$V_{\text{CB}} = 10\text{V}$ $I_E = 0$ $100\text{kHz} < f < 1\text{MHz}$			300	