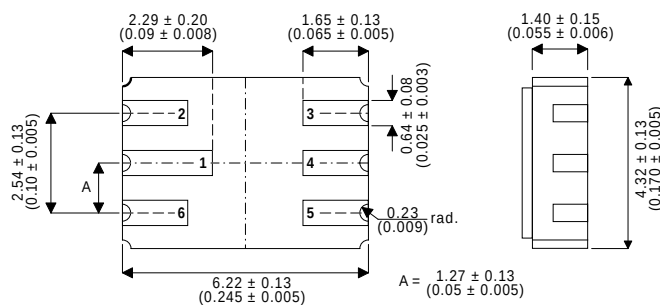


PNP DUAL TRANSISTOR IN A HERMETICALLY SEALED CERAMIC SURFACE MOUNT PACKAGE FOR HIGH RELIABILITY APPLICATIONS

MECHANICAL DATA

Dimensions in mm (inches)



FEATURES

- **DUAL SILICON PLANAR PNP TRANSISTORS**
- **HERMETIC SURFACE MOUNT PACKAGE**
- **CECC SCREENING OPTIONS**
- **SPACE QUALITY LEVEL OPTIONS**

LCC2 PACKAGE Underside View

PAD 1 – Collector 1 PAD 4 – Collector 2
PAD 2 – Base 1 PAD 5 – Emitter 2
PAD 3 – Base 2 PAD 6 – Emitter 1

ABSOLUTE MAXIMUM RATINGS PER SIDE ($T_C = 25^{\circ}\text{C}$ unless otherwise stated)

V_{CBO}	Collector – Base Voltage	-120V
V_{CEO}	Collector – Emitter Voltage	-100V
V_{EBO}	Emitter – Base Voltage	-5V
I_{CM}	Peak Pulse Current	-6A
I_C	Continuous Collector Current	-2A
P_{TOT}	Power Dissipation @ $T_{amb} = 25^{\circ}C$	1W
	Derate above $25^{\circ}C$	8mW/ $^{\circ}C$
$T_J T_{STG}$	Operating And Storage Temperature Range	-55 to $150^{\circ}C$
$R_{\theta J-A}$	Junction - Ambient Thermal Resistance	125 $^{\circ}C/W$

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

Parameter	Test Conditions	Min.	Typ.	Max.	Unit
$V_{(BR)CBO}$ Collector – Base Breakdown Voltage	$I_C = 100\mu\text{A}$	-120			V
$V_{(BR)CEO}$ Collector – Emitter Breakdown Voltage	$I_C = 10\text{mA}$	-100			
$V_{(BR)EBO}$ Emitter – Base Breakdown Voltage	$I_E = -100\mu\text{A}$	-5			
I_{CBO} Collector – Cut-off Current	$V_{CB} = -100\text{V}$ $T = 100^\circ\text{C}$			-0.1 -10	μA
I_{EBO} Emitter Cut-off Current	$V_{EB} = -4\text{V}$			-0.1	
$V_{CE(sat)}$ Collector – Emitter Saturation Voltage	$I_C = -500\text{mA}$ $I_B = -50\text{mA}^*$		-0.2	-0.3	V
	$I_C = -1\text{A}$ $I_B = -100\text{mA}^*$		-0.35	-0.5	
	$I_C = -2\text{A}$ $I_B = -200\text{mA}^*$		-0.8	-1.0	
$V_{BE(sat)}$ Base – Emitter Saturation Voltage	$I_C = -1\text{A}$ $I_B = -100\text{mA}^*$		-1.0	-1.3	
$V_{BE(on)}$ Base – Emitter Turn-On Voltage	$I_C = -1\text{A}$ $V_{CE} = -2\text{V}^*$		-0.95	-1.2	
H_{FE} DC Current Gain	$I_C = -50\text{mA}$ $V_{CE} = -2\text{V}^*$	70	200		—
	$I_C = -500\text{mA}$ $V_{CE} = 2\text{V}^*$	100	200	300	
	$I_C = -1\text{A}$ $V_{CE} = -2\text{V}^*$	55	110		
	$I_C = -2\text{A}$ $V_{CE} = -2\text{V}^*$	25	55		

* Pulse test $t_p = 300\text{ms}$, $\delta \leq 2\%$

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

Parameter	Test Conditions	Min.	Typ.	Max.	Unit
f_T Transition Frequency	$I_C = -100\text{mA}$ $V_{CE} = -5\text{V}$ $f = 100\text{MHz}$	100	140		MHz
C_{obo} Output Capacitance	$V_{CB} = -10\text{V}$ $f = 1.0\text{MHz}$			30	pF
T_{on} Switching Times	$I_C = -500\text{mA}$ $V_{CC} = 10\text{V}$		40		ns
T_{off} Switching Times	$I_{B1}=I_{B2}=50\text{mA}$		600		