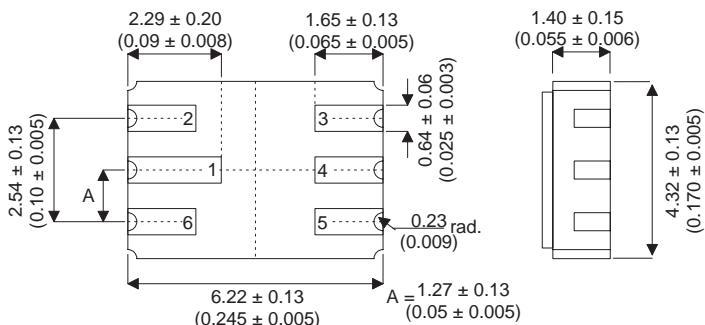


**DUAL HIGH SPEED, MEDIUM POWER, NPN
SWITCHING TRANSISTOR IN A
HERMETICALLY SEALED
CERAMIC SURFACE MOUNT PACKAGE**

MECHANICAL DATA

Dimensions in mm (inches)



**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

FEATURES

- DUAL SILICON PLANAR EPITAXIAL DUAL NPN TRANSISTOR
- HERMETIC CERAMIC SURFACE MOUNT PACKAGE
- SCREENING OPTIONS AVAILABLE

APPLICATIONS:

Hermetically sealed dual surface mount dual version of the popular 2N2369A for high reliability / space applications requiring small size and low weight devices.

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

		PER SIDE	TOTAL DEVICE
V_{CBO}	Collector – Base Voltage	40V	
V_{CEO}	Collector – Emitter Voltage	15V	
V_{EBO}	Emitter – Base Voltage	4.5V	
I_C	Collector Current	200mA	
P_D	Total Device Dissipation @ $T_A = 25^\circ\text{C}$	360mW	500mW
	Derate above 25°C	2.06mW / °C	2.85mW / °C
P_D	Total Device Dissipation @ $T_C = 25^\circ\text{C}$	680mW/°C	800mW/°C
	Derate above 25°C	3.88mW/°C	4.57mW/°C
T_{STG}, T_J	Operating and Storage Temperature Range	–65 to +200°C	

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

Parameter	Test Conditions		Min.	Typ.	Max.	Unit
$V_{(\text{BR})\text{CEO}}^*$	Collector – Emitter Breakdown Voltage	$I_C = 10\text{mA}$	$I_B = 0$	15		V
$V_{(\text{BR})\text{CBO}}$	Collector – Base Breakdown Voltage	$I_C = 10\mu\text{A}$	$I_E = 0$	40		V
$V_{(\text{BR})\text{EBO}}$	Emitter – Base Breakdown Voltage	$I_E = 10\mu\text{A}$	$I_C = 0$	4.5		V
I_{CES}	Collector – Emitter Cut-off Current	$V_{\text{CE}} = 20\text{V}$	$V_{\text{BE}} = 0$		0.40	μA
I_{CBO}	Collector – Base Cut-off Current	$V_{\text{CB}} = 20\text{V}$	$T_A = +150^\circ\text{C}$		30	
$V_{\text{CE}(\text{sat})}^*$	Collector – Emitter Saturation Voltage	$I_C = 10\text{mA}$	$I_B = 1\text{mA}$		0.20	V
			$T_A = +125^\circ\text{C}$		0.30	
		$I_C = 30\text{mA}$	$I_B = 3\text{mA}$		0.25	
		$I_C = 100\text{mA}$	$I_B = 10\text{mA}$		0.50	
$V_{\text{BE}(\text{sat})}^*$	Base – Emitter Saturation Voltage	$I_C = 10\text{mA}$	$T_A = +25^\circ\text{C}$	0.70	0.85	V
		$I_B = 1\text{mA}$	$T_A = +125^\circ\text{C}$	0.59		
			$T_A = -55^\circ\text{C}$		1.02	
		$I_C = 30\text{mA}$	$I_B = 3\text{mA}$		1.15	
		$I_C = 100\text{mA}$	$I_B = 10\text{mA}$		1.60	
h_{FE}^*	Current Gain	$I_C = 10\text{mA}$	$V_{\text{CE}} = 0.35\text{V}$	40		—
			$T_A = -55^\circ\text{C}$	20		
		$I_C = 30\text{mA}$	$V_{\text{CE}} = 0.4\text{V}$	30		
		$I_C = 10\text{mA}$	$V_{\text{CE}} = 1.0\text{V}$		120	
		$I_C = 100\text{mA}$	$V_{\text{CE}} = 1\text{V}$	20		
f_T	Transition Frequency	$I_C = 10\text{mA}$	$V_{\text{CE}} = 10\text{V}$		500	MHz
C_{ob}	Output Capacitance	$V_{\text{CB}} = 5\text{V}$	$I_E = 0$		4	pF
t_s	Storage Time	$f = 140\text{kHz}$				
t_{on}	Turn-On Time	$I_C = 10\text{mA}$	$V_{\text{CC}} = 3\text{V}$		12	ns
t_{off}	Turn-Off Time	$I_{\text{B1}} = 3\text{mA}$	$I_{\text{B2}} = 1.5\text{mA}$		18	

* Pulse Test: $t_p \leq 300\mu\text{s}$, $\delta \leq 2\%$.

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