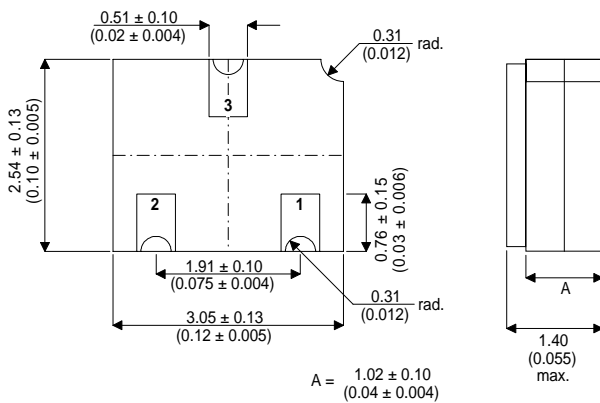


**GENERAL PURPOSE PNP TRANSISTOR
IN A HERMETICALLY SEALED
CERAMIC SURFACE MOUNT PACKAGE
FOR HIGH RELIABILITY APPLICATIONS**

MECHANICAL DATA
Dimensions in mm (inches)

$V_{CEO} = 45V$

$I_C = 500mA$



**SOT23 CERAMIC
(LCC1 PACKAGE)**

Underside View

PAD 1 – Base PAD 2 – Emitter PAD 3 – Collector

FEATURES

- SILICON PLANAR EPITAXIAL PNP TRANSISTOR
- HERMETIC CERAMIC SURFACE MOUNT PACKAGE (SOT23 COMPATIBLE)
- CECC SCREENING OPTIONS
- SPACE QUALITY LEVELS OPTIONS

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

V_{CBO}	Collector - Base Voltage	-50V
V_{CEO}	Collector - Emitter Voltage	-45V
V_{EBO}	Emitter - Base Voltage	-5V
I_C	Collector Current	500mA
P_D	Total Device Dissipation	350mW
P_D	Derate above 50°C	2.0mW / °C
R_{ja}	Thermal Resistance Junction to Ambient	350°C / W
T_{stg}, T_j	Storage Temperature, Operating Temp Range	-55 to 200°C

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

Parameter	Test Conditions	Min.	Typ.	Max.	Unit
V_{CES}^*	Collector – Emitter Sustaining Voltage	$V_{\text{BE}} = 0$	-50		V
V_{CEO}^*	Collector – Base Voltage	$I_{\text{C}} = 10\text{mA}$	-45		
V_{EBO}^*	Emitter – Base Breakdown Voltage	$I_{\text{E}} = 10\mu\text{A}$ $I_{\text{C}} = 0$	-5		
I_{CBO}^*	Collector – Base Cut-off Current	$I_{\text{E}} = 0$ $V_{\text{CB}} = -20\text{V}$		100	nA
		$T_{\text{C}} = 150^{\circ}\text{C}$		5	μA
I_{EBO}^*	Emitter Base Cut-off Current	$V_{\text{BE}} = 0.5\text{V}$ $I_{\text{C}} = 0$		10	μA
$V_{\text{CE(sat)}}^*$	Collector – Emitter Saturation Voltage	$I_{\text{C}} = 500\text{mA}$ $I_{\text{B}} = 50\text{mA}$		0.62	V
$V_{\text{BE(sat)}}^*$	Base – Emitter Saturation Voltage	$I_{\text{C}} = 500\text{mA}$ $I_{\text{B}} = 50\text{mA}$		1.2	
h_{FE}^*	DC Current Gain	$I_{\text{C}} = 100\text{mA}$ $V_{\text{CE}} = 1\text{V}$	100	600	—
		$I_{\text{C}} = 300\text{mA}$ $V_{\text{CE}} = 1\text{V}$	70		
		$I_{\text{C}} = 500\text{mA}$ $V_{\text{CE}} = 1\text{V}$	40		

* Pulse test $t_{\text{p}} = 300\mu\text{s}$, $\delta \leq 2\%$

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

Parameter	Test Conditions	Min.	Typ.	Max.	Unit
f_{T}	Transition Frequency	$I_{\text{C}} = 10\text{mA}$ $V_{\text{CE}} = 5\text{V}$ $f = 35\text{MHz}$		100	MHz
C_{ob}	Output Capacitance	$V_{\text{CB}} = 10\text{V}$ $I_{\text{E}} = 0$ $f = 1.0\text{MHz}$		8	pF