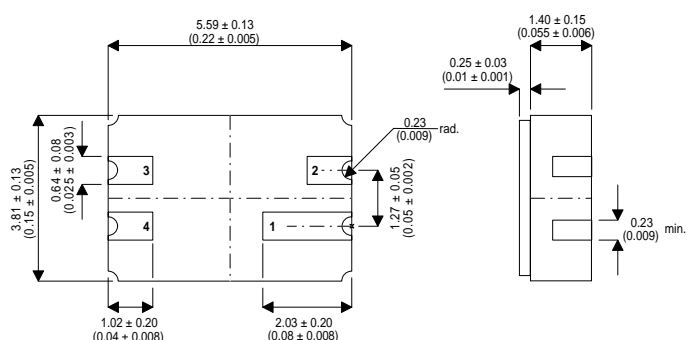


HIGH SPEED PNP MEDIUM VOLTAGE TRANSISTOR IN A CERAMIC SURFACE MOUNT PACKAGE

MECHANICAL DATA

Dimensions in mm (inches)



FEATURES

- CERAMIC SURFACE MOUNT HERMETIC PACKAGE
- LOW WEIGHT
- SMALL FOOTPRINT
- SCREENING OPTIONS AVAILABLE

LCC3 PACKAGE Underside View

PAD 1 – Collector PAD 3 – Emitter
PAD 2 – N/C PAD 4 – Base

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

V_{CEO}	Collector – Emitter Voltage	-80V
V_{CBO}	Collector – Base Voltage	-80V
V_{EBO}	Emitter – Base Voltage	-5V
I_C	Continuous Collector Current	-1A
P_D	Total Device Dissipation at $T_A = 25^{\circ}C$	400mW
	Derate above $25^{\circ}C$	2.28 mW/ $^{\circ}C$
T_{stg}	Operating and Storage Temperature Range	-55 to +200 $^{\circ}C$

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

Parameter		Test Conditions	Min.	Typ.	Max.	Unit
I_{CBO}	Collector Cut Off Current	$V_{CB} = -60V$ $T_A = 150^{\circ}C$			-50	nA
					-50	μA
I_{EBO}	Emitter Cut Off Current	$V_{EB} = -5V$			-10	μA
$V_{CE(sat)}$	Collector Emitter Saturation Voltage ¹	$I_C = -150mA$ $I_B = -15mA$			-0.15	V
		$I_C = -500mA$ $I_B = -50mA$			0.50	
$V_{BE(sat)}$	Base Emitter Saturation Voltage ¹	$I_C = -150mA$ $I_B = -15mA$			-0.9	V
$V_{BE(on)}$	Base Emitter on Voltage	$I_C = -500mA$ $V_{CE} = -0.5V^1$			-1.1	V
$V_{(BR)CEO}$	Collector Emitter Breakdown Voltage	$I_C = -10mA$	-80			V
$V_{(BR)CBO}$	Collector Base Breakdown Voltage	$I_C = -10\mu A$	-80			V
$V_{(BR)EBO}$	Emitter Base Breakdown Voltage	$I_E = -10\mu A$	-5.0			V
h_{FE}	DC Current Gain	$I_C = -100mA$ $V_{CE} = -5.0V$ @-55°C ¹	40			—
		$I_C = -100\mu A$ $V_{CE} = -5.0V$	75			
		$I_C = -100mA$ $V_{CE} = -5.0V^1$	100		300	
		$I_C = -500mA$ $V_{CE} = -5.0V^1$	70			
		$I_C = -1.0A$ $V_{CE} = -5.0V^1$	25			

SMALL SIGNAL CHARACTERISTICS

C_{obo}	Output Capacitance	$V_{CE} = -10V$ $f = 1MHz$			20	pF
C_{ibo}	Input Capacitance	$V_{EB} = -0.5V$ $f = 1MHz$			110	
h_{fe}	Small Signal Gain	$I_C = -50mA$ $V_{CE} = -10V$ $f = 100MHz$	1.5		5.0	—

SWITCHING CHARACTERISTICS

t_{on}	Turn On Time	$I_C = -500mA$ $I_{B1} = -I_{B2} = -50mA$			100	ns
t_f	Fall Time				50	
t_s	Storage Time				350	

¹Pulse test $t_p = 300\mu s$, $\delta = 1\%$