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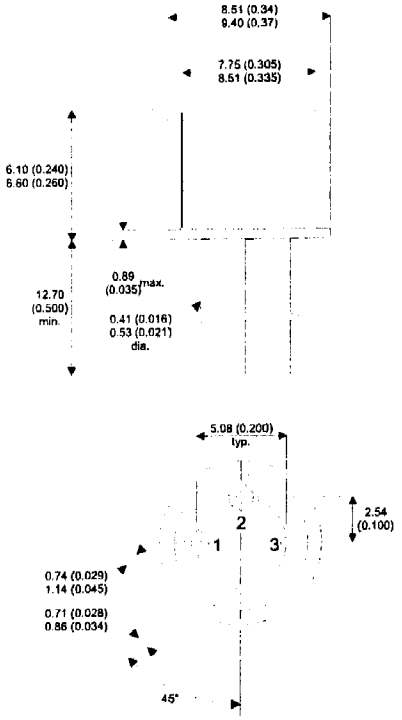
2N6190

MECHANICAL DATA

Dimensions in mm(Inches)



TO39 PACKAGE

Pin 1 = Emitter Pin 2 = Base Pin 3 = Collector

PNP SILICON TRANSISTORS

FEATURES

- **SILICON PLANAR EPITAXIAL PNP TRANSISTOR**
- **HERMETICALLY SEALED TO-39 PACKAGE**
- **CECC LEVEL SCREENING OPTIONS**

APPLICATIONS:

Hermetically sealed, the 2N6190 silicon planar epitaxial PNP transistor is intended for general purpose applications.

ABSOLUTE MAXIMUM RATINGS T_{CASE} = 25°c unless otherwise stated

V_{CBO}	Collector – Base Voltage(I_E = 0)	80V
V_{CEO}	Collector – Emitter Voltage (I_B = 0)	80V
V_{EBO}	Emitter – Base Voltage (I_C = 0)	6V
I_C	Collector Current	5A
I_B	Base Current	1A
P_{tot}	Total Dissipation at $T_C \leq 25°C$	10W
	derate above 25°C	17.5°C/W
T_{stg}	Storage Temperature Range	–55 to +200°C
T_j	Junction temperature	200°C

ELECTRICAL CHARACTERISTICS (T_{case} = 25°C unless otherwise stated)

	Parameter	Test Conditions		Min.	Typ.	Max.	Unit
$V_{(BR)CEO}$*	Collector Emitter Breakdown Voltage	I_C = 50mA		80			V
I_{CBO}	Collector-Base Cut Off Current	I_E = 0	V_{CB} = 80V			10	µA
I_{CEX}	Collector-Emitter Cut Off Current	V_{BE} = 1.5V	V_{CE} = 75V			10	µA
			T_A = 150°C			1.0	mA
I_{CEO}	Collector-Emitter Cut Off Current	I_B = 0	V_{CE} = 75V			100	µA
I_{EBO}	Collector-Emitter Cut Off Current	V_{BE} = 6V				100	µA
$V_{CE(sat)}$*	Collector Emitter Saturation Voltage	I_C = 2A	I_B = 0.2A			0.7	V
		I_C = 5A	I_B = 0.5A			1.2	
$V_{BE(sat)}$*	Base Emitter Voltage	I_C = 2A	I_B = 0.2A			1.2	V
		I_C = 5A	I_B = 0.5A			1.8	
h_{FE}*	DC Current Gain	I_C = 0.5A	V_{CE} = 2V	30			—
		I_C = 2A	V_{CE} = 2V	30		120	
		I_C = 5A	V_{CE} = 2V	20			
f_T	Transition Frequency	V_{CE} = 10V f = 10MHz	I_C = 0.5A	30			MHz
C_{IBO}	Input Capacitance, Output Open Circuited	V_{BE} = 2V f =100kHz	I_C = 0			1250	pF
C_{OBO}	Open Circuit Output Capacitance	V_{CB} = 10V f =100kHz	I_E = 0			300	
t_d	Delay Time	V_{CC} = 40V	I_E = 2.0A			100	ns
t_r	Rise Time	$V_{BE(off)}$ = 3.0	I_{B1} = 0.2A			100	
t_s	Storage Time	V_{CC} = 40V	I_E = 2.0A			20	µs
t_f	Fall Time	I_{B1} = I_{B2} = 0.2A				200	ns

* Pulse Test: t_p = 300µs , δ = 1%.