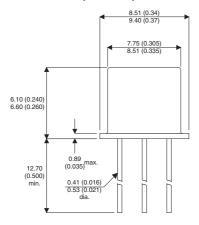
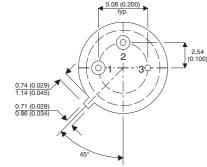




MECHANICAL DATA

Dimensions in mm (inches)





TO39 PACKAGE (TO-205AD)

Underside View

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

MEDIUM POWER SILICON NPN PLANAR TRANSISTOR

General purpose NPN Transistor in a hermetic TO39 package.

$$V_{CEO} = 100V$$

$$I_C = 1A$$

$$P_{TOT} = 5W$$

ABSOLUTE MAXIMUM RATINGS (T_{case} = 25°C unless otherwise stated)

V_{CBO}	Collector - Base Voltage	120V
V_{CEO}	Collector – Emitter Voltage	100V
V_{EBO}	Emitter – Base Voltage	6V
V_{CER}	Collector - Emitter Sustaining Voltage	100V
$I_{\mathbb{C}}$	Collector Current	1A
P_{TOT}	Dissipation @ T _{amb} = 25°C	1W
	@ Case Temp. = 100°C	2.9W
	@ Case Temp. = 25°C	5W
	Derating linearly	175°C/W
T_{stg},T_{j}	Storage and Operatuing Junction Temperature	−65 to 175°C

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

	Parameter	Test Conditions		Min.	Тур.	Max.	Unit
V _{CEO(SUS)}	Collector - Emitter Sustaining Voltage	$I_C = 10mA$	$I_B = 0$	100			
V _{CE(sat)}	Collector – Emitter Saturation Voltage	I _C = 200mA	I _B = 20mA			1.2	V
V _{BE(sat)}	Base – Emitter Saturation Voltage	I _C = 200mA	I _B = 20mA			1.5	
I _{CBO}	Collector Cut-off Current	V _{CB} =V _{CE}	I _E = 0			1	mA
			T _{amb} = 100°C			60	ША
I _{EBO}	Emitter - Base Reverse Current	$V_{EB} = 5V$	$I_C = 0$			0.1	μΑ
h _{FE}	DC Current Gain	V _{CE} = 10V	I _C = 10mA	30			_
		V _{CE} = 10V	I _C = 200mA	40		120	
fT	Gain Bandwidth Product	V _{CE} = 10V	I _C = 50mA	60	250		MHz
			f = 10MHz				
NF	Noise Figure	V _{CE} = 10V	I _C = 300μA		6		dB
			f = 1KHz				
C _{ob}	Output Capacitance	V _{CB} = 10V	f = 0			25	рF
C _{ib}	Input Capacitance	V _{EB} = 1V	f = 0			100	ρΓ

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