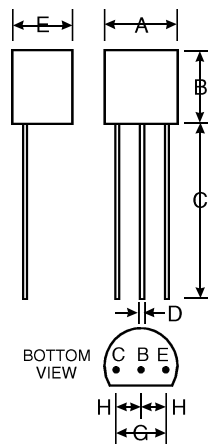


Features

For General Purpose Switching and Amplifier Applications
Especially Suitable for AF Driver and Low Power Output Stages



TO-92		
Dim	Min	Max
A	4.32	4.83
B	4.32	4.78
C	12.50	15.62
D	0.36	0.56
E	3.15	3.94
G	2.29	2.79
H	1.14	1.40
All Dimensions in mm		

Mechanical Data

Case: TO-92, Plastic
Leads: Solderable per MIL STD 202, Method 208
Pin Connections: See Diagram
Approx. Weight: 0.18 grams

Maximum Ratings @ $T_A = 25^\circ\text{C}$ unless otherwise specified

Characteristic	Symbol	Value	Unit
Collector-Emitter Voltage	$-V_{CEO}$	25	V
Collector-Base Voltage	$-V_{CBO}$	25	V
Emitter-Base Voltage	$-V_{EBO}$	4.0	V
Collector Current	$-I_C$	200	mA
Peak Collector Current	$-I_{CM}$	800	mA
Base Current	$-I_B$	50	mA
Power Dissipation (Note 1)	P_d	625	mW
Thermal Resistance, Junction to Ambient (Note 1)	R_{JA}	200	K/W
Operating and Storage Temperature Range	T_j, T_{STG}	-65 to +150	$^\circ\text{C}$

Electrical Characteristics @ $T_A = 25^\circ\text{C}$ unless otherwise specified

Characteristic	Symbol	Min	Typ	Max	Unit	Test Conditions
DC Current Gain	h_{FE}	120	— 60	360	—	$V_{CE} = -1.0\text{V}, I_C = -2.0\text{mA}$ $V_{CE} = -1.0\text{V}, I_C = -50\text{mA}$
Collector-Base Cutoff Current	$-I_{CBO}$	—	—	50	nA	$V_{CB} = -20\text{V}$
Emitter-Base Cutoff Current	$-I_{EBO}$	—	—	50	nA	$V_{EB} = -3\text{V}$
Collector-Emitter Saturation Voltage	$-V_{CE(SAT)}$	—	—	0.4	V	$I_C = -50\text{mA}, I_B = -5.0\text{mA}$
Base-Emitter Saturation Voltage	$-V_{BE(SAT)}$	—	—	0.95	V	$I_C = -50\text{mA}, I_B = -5.0\text{mA}$
Collector-Emitter Breakdown Voltage	$-V_{(BR)CEO}$	25	—	—	V	$I_C = -1.0\text{mA}$
Collector-Base Breakdown Voltage	$-V_{(BR)CBO}$	25	—	—	V	$I_C = -10\mu\text{A}$
Emitter-Base Breakdown Voltage	$-V_{(BR)EBO}$	4.0	—	—	V	$I_E = -10\mu\text{A}$
Gain Bandwidth Product	f_T	—	200	—	MHz	$V_{CE} = -5.0\text{V}, I_C = -10\text{mA}, f = 50\text{MHz}$
Collector-Base Capacitance	C_{CBO}	—	12	—	pF	$V_{CB} = -10\text{V}, f = 1.0\text{MHz}$

Notes: 1. Valid provided that leads are kept at ambient temperature at a distance of 2.0mm from case.