

TO-92 Plastic-Encapsulate Transistors

A733 TRANSISTOR (PNP)

FEATURE

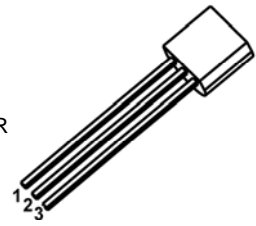
- Power dissipation

MAXIMUM RATINGS (T_a=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
V _{CB0}	Collector-Base Voltage	-60	V
V _{CE0}	Collector-Emitter Voltage	-50	V
V _{EB0}	Emitter-Base Voltage	-5	V
I _C	Collector Current -Continuous	-100	mA
P _C	Collector Power Dissipation	250	mW
T _J	Junction Temperature	150	°C
T _{stg}	Junction and Storage Temperature	-55-150	°C

TO-92

1. EMITTER
2. COLLECTOR
3. BASE



ELECTRICAL CHARACTERISTICS (T_a=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V _{(BR)CBO}	I _C = -50uA, I _E =0	-60			V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C = -1mA, I _B =0	-50			V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E = -50uA, I _C =0	-5			V
Collector cut-off current	I _{CB0}	V _{CB} = -60V, I _E =0			-0.1	uA
Emitter cut-off current	I _{EBO}	V _{EB} = -5 V, I _C =0			-0.1	uA
DC current gain	h _{FE}	V _{CE} = -6V, I _C = -1mA	90	200	600	
Collector-emitter saturation voltage	V _{CE(sat)}	I _C = -100mA, I _B =- 10mA		-0.18	-0.3	V
Base-emitter voltage	V _{BE}	V _{CE} =-6V, I _C =-1.0mA	-0.58	-0.62	-0.68	V
Transition frequency	f _T	V _{CE} =-6V, I _C =-10mA	100			MHz
Collector output capacitance	C _{ob}	V _{CB} =-10V, I _E =0, f=1MHz			6	pF
Noise figure	NF	V _{CE} =-6V, I _C =-0.3mA, R _g =10kΩ, f=100Hz			20	dB

CLASSIFICATION OF h_{FE}

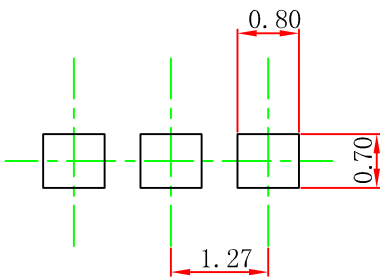
Rank	R	Q	P	K
Range	90-180	135-270	200-400	300-600

TO-92 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	3.300	3.700	0.130	0.146
A1	1.100	1.400	0.043	0.055
b	0.380	0.550	0.015	0.022
c	0.360	0.510	0.014	0.020
D	4.300	4.700	0.169	0.185
D1	3.430		0.135	
E	4.300	4.700	0.169	0.185
e	1.270 TYP		0.050 TYP	
e1	2.440	2.640	0.096	0.104
L	14.100	14.500	0.555	0.571
Φ		1.600		0.063
h	0.000	0.380	0.000	0.015

TO-92 Suggested Pad Layout



Note:

1. Controlling dimension: in millimeters.
2. General tolerance: $\pm 0.05\text{mm}$.
3. The pad layout is for reference purposes only.

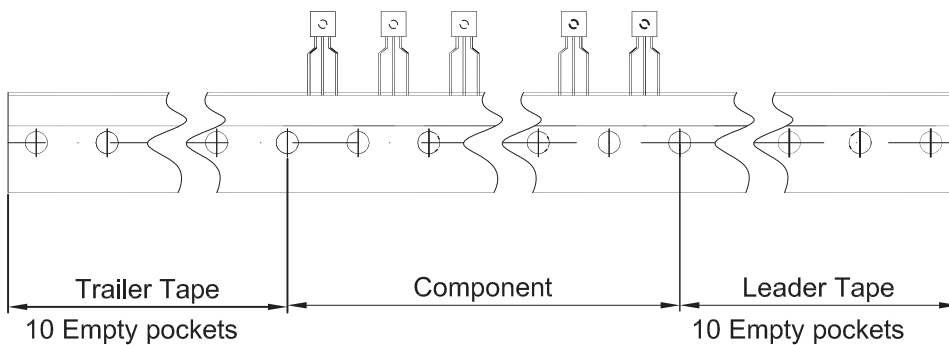
NOTICE

JCET reserve the right to make modifications, enhancements, improvements, corrections or other changes without further notice to any product herein. JCET does not assume any liability arising out of the application or use of any product described herein.

TO-92 PACKAGE TAPEING DIMENSION



Dimiensions are in millimeter								
A1	A	T	P	P0	P2	F1	F2	W
4.5	4.5	3.5	12.7	12.7	6.35	2.5	2.5	18.0
W0	W1	W2	H	H0	D0	t1	t2	ΔP
6.0	9.0	1.0 MAX.	19.0	16.0	4.0	0.4	0.2	0



Package	Box	Box Size(mm)	Carton	Carton Size(mm)
TO-92	2000 pcs	333×162×43	20,000 pcs	350×340×250