

RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

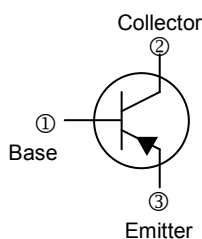
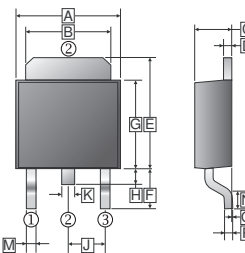
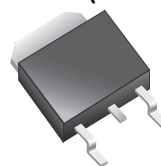
DESCRIPTION

- Designed for General Purpose Amplifier and Low Speed Switching Applications
- Lead Formed for Surface Mount Applications in Plastic Sleeves (No Suffix)
- Straight Lead Version in Plastic Sleeves ("-1" Suffix)
- Lead Formed Version in 16 mm Tape and Reel ("T4" Suffix)
- Electrically Similar to Popular TIP31 and TIP32 Series

PACKAGE INFORMATION

Package	MPQ	Leader Size
TO-252	2.5K	13 inch

TO-252 (D-Pack)



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	6.35	6.9	J	2.3	REF.
B	4.95	5.53	K	0.89	REF.
C	2.1	2.5	M	0.45	1.14
D	0.41	0.9	N	1.55	Typ.
E	6	7.5	O	0	0.13
F	2.90	REF.	P	0.58	REF.
G	5.4	6.4			
H	0.6	1.2			

ABSOLUTE MAXIMUM RATINGS (T_A=25°C unless otherwise specified)

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V _{CB0}	-100	V
Collector to Emitter Voltage	V _{CE0}	-100	V
Emitter to Base Voltage	V _{EBO}	-5	V
Collector Current	I _C	-3	A
Collector Power Dissipation	P _C	1.25	W
Junction and Storage Temperature	T _J , T _{STG}	150, -65 ~ 150	°C

CHARACTERISTICS (T_A=25°C unless otherwise specified)

Parameter	Symbol	Min.	Max.	Unit	Test Condition
Collector-Base Breakdown Voltage	V _{(BR)CBO}	-100	-	V	I _C = -1mA, I _E =0
Collector-Emitter Breakdown Voltage ¹	V _{CEO(sus)}	-100	-	V	I _C = -30mA, I _B =0
Emitter-Base Breakdown Voltage	V _{(BR)EBO}	-5	-	V	I _E = -1mA, I _C =0
Collector Cut-Off Current	I _{CES}	-	-20	uA	V _{CE} = -100V, V _{EB} =0
Collector Cut-Off Current	I _{CEO}	-	-50	uA	V _{CE} = -60V, I _B =0
Emitter Cut-Off Current	I _{EBO}	-	-1	mA	V _{EB} = -5V, I _C =0
DC Current Gain	h _{FE(1)}	25	-		V _{CE} = -4V, I _C = -1A
	h _{FE(2)}	15	75		V _{CE} = -4V, I _C = -3A
Collector-Emitter Saturation Voltage	V _{CE(Sat)}	-	-1.2		I _C = -3A, I _B = -0.375A
Base-Emitter Voltage	V _{BE(Sat)}	-	-1.8		V _{CE} = -4V, I _C = -3A
Transition Frequency	f _T	3	-	MHZ	V _{CE} = -10V, I _C = -0.5A, f _T =1KHZ

Notes:

1. Pulse Test: Pulse width ≤ 300μs, duty cycle ≤ 2%

CHARACTERISTIC CURVES

