

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

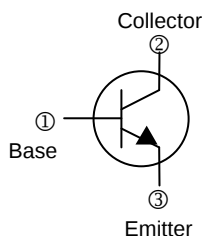
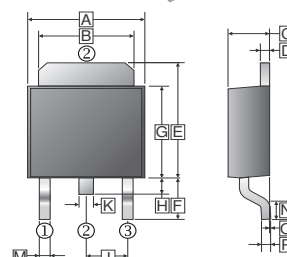
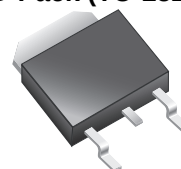
FEATURES

- Designed for general
- Excellent DC Current Gain Characteristics

PACKAGE INFORMATION

Package	MPQ	Leader Size
TO-252	2.5K	13 inch

D-Pack (TO-252)



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	6.35	6.8	J	2.30	REF.
B	5.20	5.50	K	0.64	0.90
C	2.15	2.40	M	0.50	1.1
D	0.45	0.58	N	0.9	1.65
E	6.8	7.5	O	0	0.15
F	2.40	3.0	P	0.43	0.58
G	5.40	6.25			
H	0.64	1.20			

ABSOLUTE MAXIMUM RATINGS ($T_A=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Ratings	Unit
Collector to Base Voltage	V_{CBO}	100	V
Collector to Emitter Voltage	V_{CEO}	100	V
Emitter to Base Voltage	V_{EBO}	5	V
Collector Current -Continuous	I_C	3	A
Collector Power Dissipation	P_C	1.25	W
Junction and Storage Temperature Range	T_J, T_{STG}	150, -55~150	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Collector-base breakdown voltage	$V_{(BR)CBO}$	100	-	-	V	$I_C=1\text{mA}, I_E=0$
Collector-emitter breakdown voltage	$V_{CEO(SUS)}$	100	-	-	V	$I_C=30\text{mA}, I_B=0$
Emitter-base breakdown voltage	$V_{(BR)EBO}$	5	-	-	V	$I_E=1\text{mA}, I_C=0$
Collector cut-off current	I_{CES}	-	-	20	μA	$V_{CE}=100\text{V}, V_{EB}=0$
Collector cut-off current	I_{CEO}	-	-	50	μA	$V_{CE}=60\text{V}, I_B=0$
Emitter cut-off current	I_{EBO}	-	-	1	mA	$V_{EB}=5\text{V}, I_C=0$
DC current gain	h_{FE}	25	-	-		$V_{CE}=4\text{V}, I_C=1\text{A}$
		10	-	50		$V_{CE}=4\text{V}, I_C=3\text{A}$
Collector-emitter saturation voltage	$V_{CE(sat)}$	-	-	1.2	V	$I_C=3\text{A}, I_B=375\text{mA}$
Base-emitter voltage	$V_{BE(ON)}$	-	-	1.8	V	$V_{CE}=4\text{V}, I_C=3\text{A}$
Transition frequency	f_T	3	-	-	MHz	$V_{CE}=10\text{V}, I_C=500\text{mA}, f_T=1\text{KHz}$

Note:

1. Pulse Test: $PW \leq 300\mu\text{s}$, Duty Cycle $\leq 2\%$.