Elektronische Bauelemente

MJD31C

3A , 100V

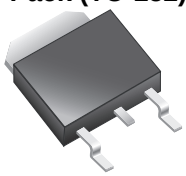
NPN Plastic Encapsulated Transistor

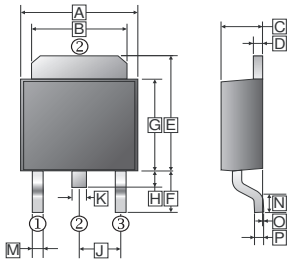
RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

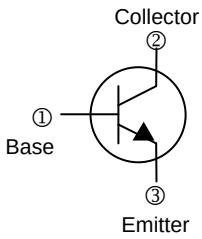
FEATURES

- Designed for general
- Excellent DC Current Gain Characteristics

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			

PACKAGE INFORMATION

Package	MPQ	Leader Size
TO-252	2.5K	13 inch

ABSOLUTE MAXIMUM RATINGS (T_A=25°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	℃

ELECTRICAL CHARACTERISTICS (T_A=25℃ unless otherwise noted)

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

Note:
1.Pulse Test: PW ≦300μS, Duty Cycle≦2%.