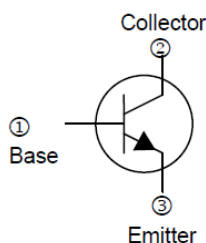
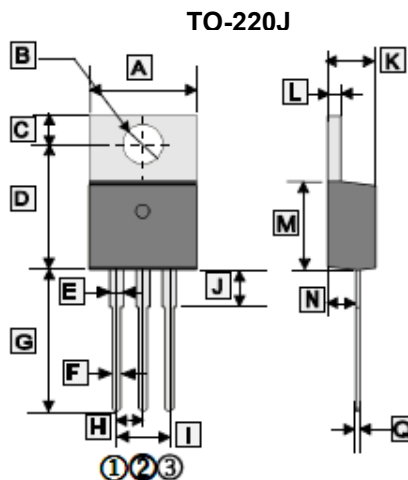


RoHS Compliant Product  
A suffix of "-C" specifies halogen & lead-free

## FEATURES

- Low saturation voltage
- Excellent DC current gain characteristic



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	9.57	10.57	I	4.68	5.48
B	3.54	4.14	J	2.95	3.96
C	2.54	2.94	K	4.27	4.87
D	11.86	13.26	L	1.07	1.47
E	0.97	1.57	M	8.0	10.0
F	0.51	1.11	N	2.03	2.92
G	12.7	13.8	Q	0.30	0.65
H	2.540 TYP.				

## ABSOLUTE MAXIMUM RATINGS (T<sub>A</sub>=25°C unless otherwise specified)

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V <sub>CBO</sub>	80	V
Collector to Emitter Voltage	V <sub>CEO</sub>	60	V
Emitter to Base Voltage	V <sub>EBO</sub>	5	V
Continuous Collector Current	I <sub>C</sub>	3	A
Collector Power Dissipation	P <sub>C</sub>	2	W
Junction and Storage Temperature	T <sub>J</sub> , T <sub>STG</sub>	150, -55~150	°C

## ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C unless otherwise specified)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Collector to Base Breakdown Voltage	V <sub>(BR)CBO</sub>	80	-	-	V	I <sub>C</sub> =0.05mA, I <sub>E</sub> =0
Collector to Emitter Breakdown Voltage	V <sub>(BR)CEO</sub>	60	-	-	V	I <sub>C</sub> =1mA, I <sub>B</sub> =0
Emitter to Base Breakdown Voltage	V <sub>(BR)EBO</sub>	5	-	-	V	I <sub>E</sub> =0.05mA, I <sub>C</sub> =0
Collector Cut-Off Current	I <sub>CBO</sub>	-	-	10	µA	V <sub>CB</sub> =60V, I <sub>E</sub> =0
Emitter Cut-Off Current	I <sub>EBO</sub>	-	-	10	µA	V <sub>EB</sub> =4V, I <sub>C</sub> =0
DC Current Gain	h <sub>FE</sub>	100	-	320		V <sub>CE</sub> =5V, I <sub>C</sub> =0.5A
Collector to Emitter Saturation Voltage	V <sub>CE(sat)</sub>	-	-	1	V	I <sub>C</sub> =2A, I <sub>B</sub> =200mA
Base to Emitter Saturation Voltage	V <sub>BE(sat)</sub>	-	-	1.5	V	I <sub>C</sub> =2A, I <sub>B</sub> =200mA
Transition Frequency	f <sub>T</sub>	-	8	-	MHz	V <sub>CE</sub> =5V, I <sub>C</sub> =0.5A, f=5MHz
Collector Output Capacitance	C <sub>ob</sub>	-	70	-	pF	V <sub>CB</sub> =10V, I <sub>E</sub> =0, f=1MHz

**CHARACTERISTIC CURVES**

Static Characteristic

