Elektronische Bauelemente

TIP32 / TIP32C

PNP Plastic-Encapsulate Transistor

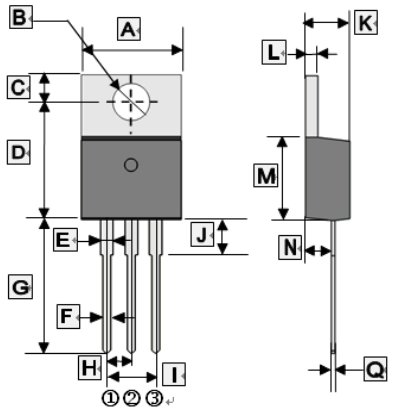
RoHS Compliant Product

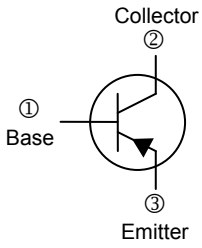
A suffix of "-C" specifies halogen and lead free

FEATURES

- Medium Power Linear Switching Applications

TO-220J





REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	10.010	10.350	I	4.980	5.180
B	3.735	3.935	J	3.560	3.960
C	2.590	2.890	K	4.470	4.670
D	12.060	12.460	L	1.200	1.400
E	1.170	1.370	M	8.500	8.900
F	0.710	0.910	N	2.520	2.820
G	13.400	13.800	Q	0.330	0.650
H	2.540 TYP.				

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

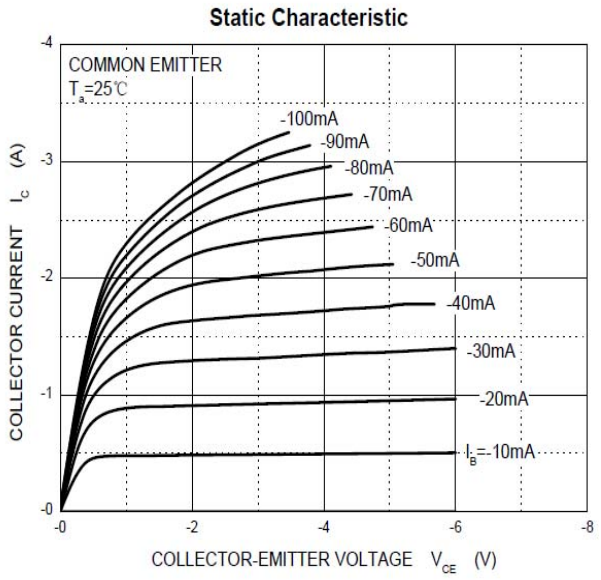
Parameter	Symbol	Ratings		Unit
		TIP32	TIP32C	
Collector - Base Voltage	V_{CBO}	-40	-100	V
Collector - Emitter Voltage	V_{CEO}	-40	-100	V
Emitter - Base Voltage	V_{EBO}	-5		V
Collector Current -Continuous	I_C	-3		A
Collector Power Dissipation	P_C	2		W
Maximum Junction to Ambient	$R_{\theta JA}$	62.5		°C / W
Junction, Storage Temperature	T_J, T_{STG}	150, -55~150		°C

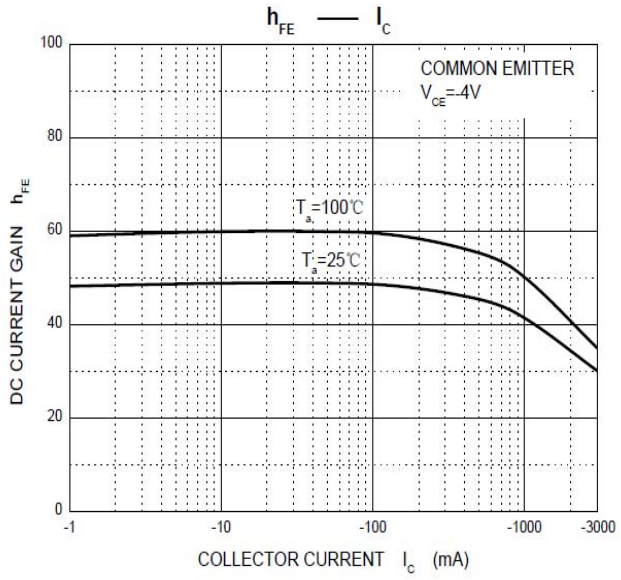
ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise specified)

Parameter		Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Collector-Base Breakdown Voltage	TIP32	$V_{(BR)CBO}$	-40	-	-	V	I_C= -1mA, I_E=0
	TIP32C		-100	-	-		
Collector-Emitter Breakdown Voltage[1]	TIP32	$V_{(BR)CEO}$	-40	-	-	V	I_C= -30mA, I_B=0
	TIP32C		-100	-	-		
Emitter-Base Breakdown Voltage		$V_{(BR)EBO}$	-5	-	-	V	I_E= -1mA, I_C=0
Collector Cut-Off Current	TIP32	I_{CBO}	-	-	-200	μA	V_{CB}= -40V, I_E=0
	TIP32C						V_{CB}= -100V, I_E=0
Collector Cut-Off Current	TIP32	I_{CEO}	-	-	-0.3	mA	V_{CE}= -30V, I_B=0
	TIP32C						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
			15	-	75		V_{CE}= -4V, I_C= -3A
Collector-Emitter Saturation Voltage		$V_{CE(sat)}$	-	-	-1.2	V	I_C= -3A, I_B= -0.375A
Base-Emitter Voltage		V_{BE}	-	-	-1.8	V	V_{CE}= -4V, I_C= -3A
Transition Frequency		f_T	3	-	-	MHz	V_{CE}= -10V, I_C= -0.5A

Notes：
1. Pulse Test: PW≦300μs, Duty Cycle≦2%.

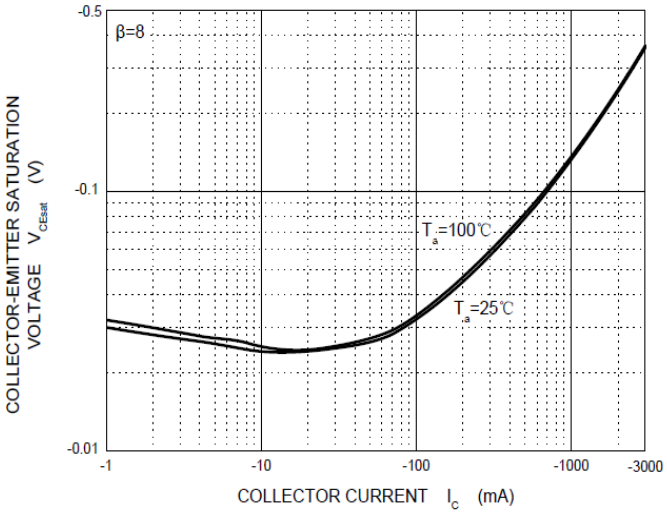
CHARACTERISTIC CURVE



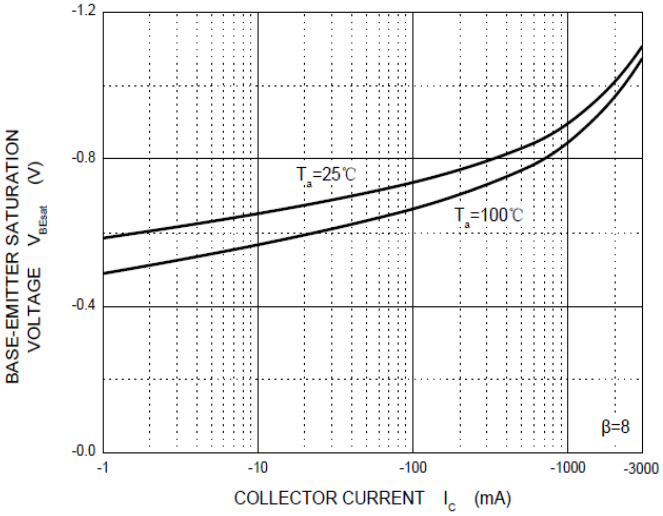


CHARACTERISTIC CURVE

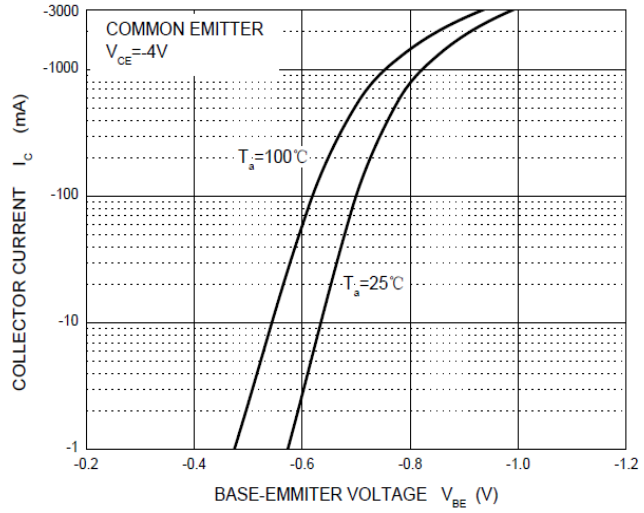
V_{CEsat} — I_C



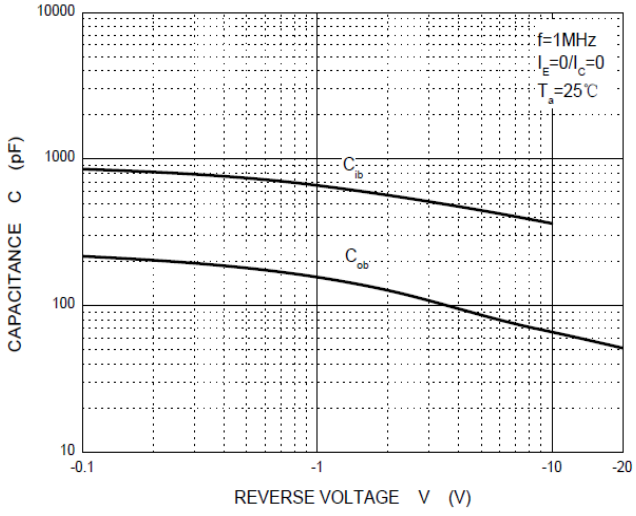
V_{BEsat} — I_C



I_C — V_{BE}



C_{ob} / C_{ib} — V_{CB} / V_{EB}



P_C — T_a