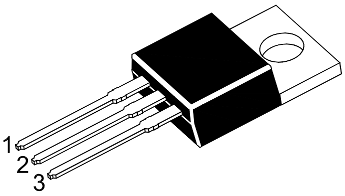
ST TIP32C

PNP Silicon Epitaxial Planar Transistor

for power switching and amplifier applications



1.Base 2.Collector 3.Emitter

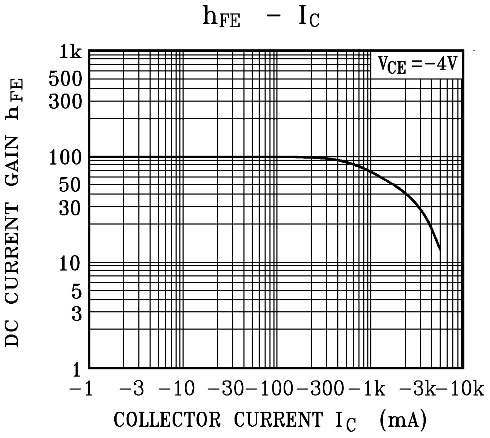
TO-220 Plastic Package

Absolute Maximum Ratings (T_a = 25 °C)

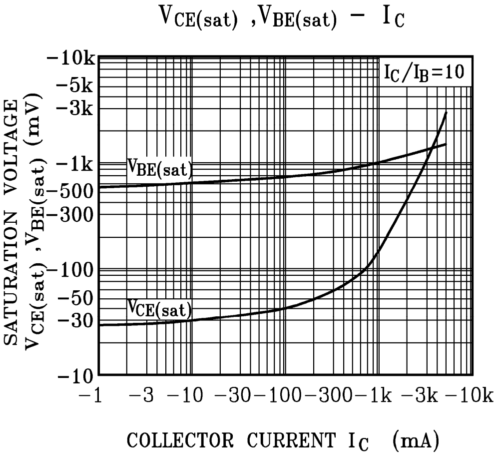
Parameter	Symbol	Value	Unit
Collector Base Voltage	$-V_{CBO}$	100	V
Collector Emitter Voltage	$-V_{CEO}$	100	V
Emitter Base Voltage	$-V_{EBO}$	5	V
Collector Current	$-I_C$	3	A
Collector Current (Pulse)	$-I_{CP}$	5	A
Base Current	$-I_B$	1	A
Power Dissipation (T_a = 25 °C)	P_{tot}	2	W
Power Dissipation (T_c = 25 °C)	P_{tot}	40	W
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_s	- 65 to + 150	°C

Characteristics at T_a = 25 °C

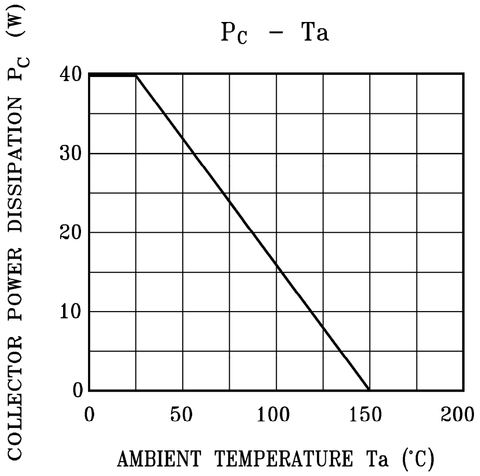
Parameter	Symbol	Min.	Max.	Unit
DC Current Gain at $-V_{CE}$ = 4 V, $-I_C$ = 1 A at $-V_{CE}$ = 4 V, $-I_C$ = 3 A	 h_{FE} h_{FE}	 25 10	 - 50	 - -
Collector Emitter Sustaining Voltage at $-I_C$ = 30 mA	$-V_{CEO(sus)}$	100	-	V
Collector Cutoff Current at $-V_{CE}$ = 100 V	$-I_{CES}$	-	0.2	mA
Collector Cutoff Current at $-V_{CE}$ = 60 V	$-I_{CEO}$	-	0.3	mA
Emitter Cutoff Current at $-V_{EB}$ = 5 V	$-I_{EBO}$	-	1	mA
Collector Emitter Saturation Voltage at $-I_C$ = 3 A, $-I_B$ = 375 mA	$-V_{CE(sat)}$	-	1.2	V
Base Emitter On Voltage at $-V_{CE}$ = 4 V, $-I_C$ = 3 A	$-V_{BE(on)}$	-	1.8	V
Transition Frequency at $-V_{CE}$ = 10 V, $-I_C$ = 500 mA, f = 1 MHz	f_T	3	-	MHz



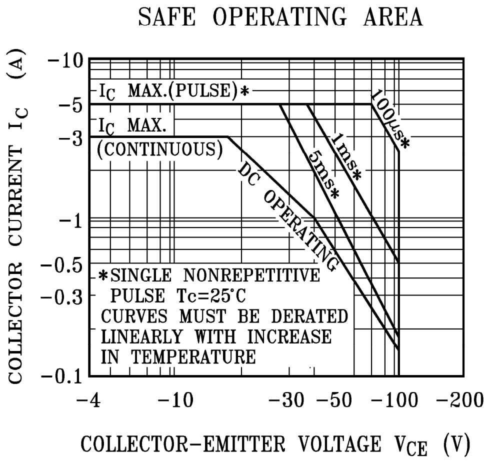
h_{FE} – I_C



$V_{CE(sat)}$, $V_{BE(sat)}$ – I_C

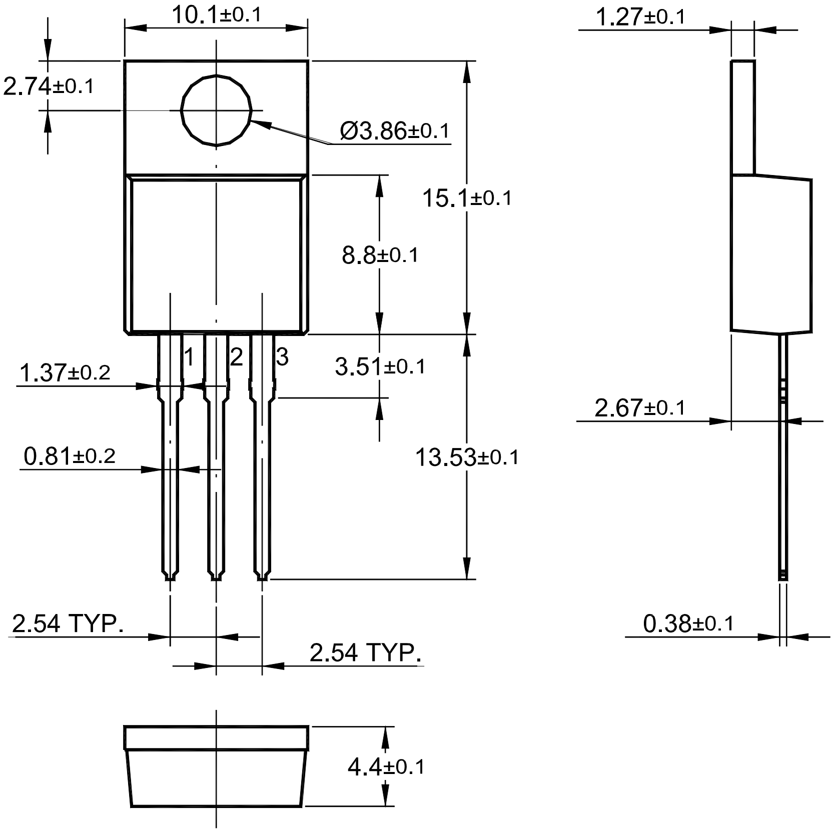


P_C – Ta



SAFE OPERATING AREA

TO-220 PACKAGE OUTLINE



Dimensions in mm