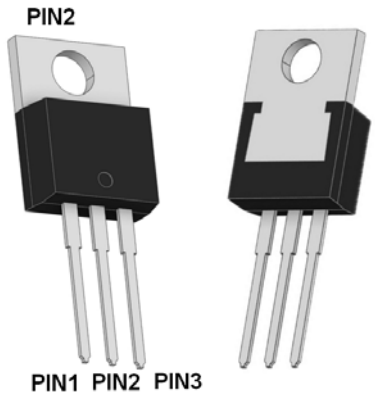
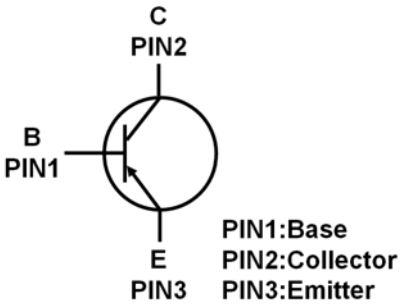
PNP Silicon Power Transistors





Features
- Epoxy Meets UL 94 V-0 Flammability Rating
- Halogen Free

Applications
- Complement to TIP41C
- High switching speed

Mechanical Data
- Package: TO-220AB
- Terminals: Tin plated leads, solderable per J-STD-002 and JESD22-B102
- Unit Weight: 1.9g

■ **Maximum Ratings** (Ta=25℃ unless otherwise noted)

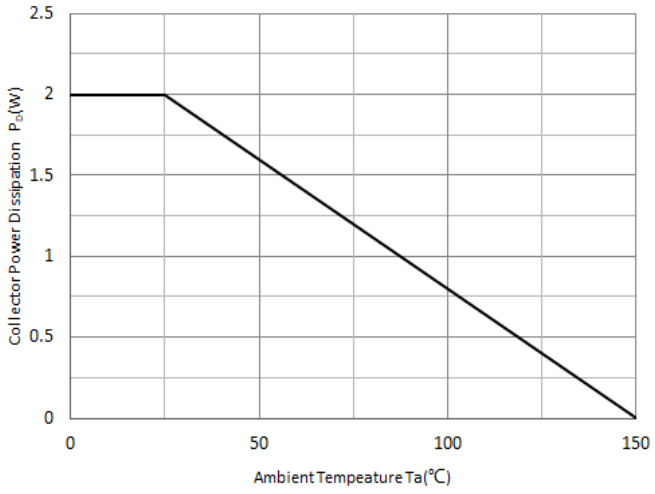
Item	Symbol	Unit	Value
Device marking code			TIP42C
Collector-base voltage	V_{CBO}	V	-100
Collector-emitter voltage	V_{CEO}	V	-100
Emitter-base voltage	V_{EBO}	V	-5
Collector current	I_C	A	-6
Power dissipation	P_D	W	2
Thermal resistance, junction-to-ambient (Note1)	R_{thJA}	℃/W	62.5
Junction temperature	T_j	℃	-55 to +150
Storage temperature	T_{STG}	℃	-55 to +150

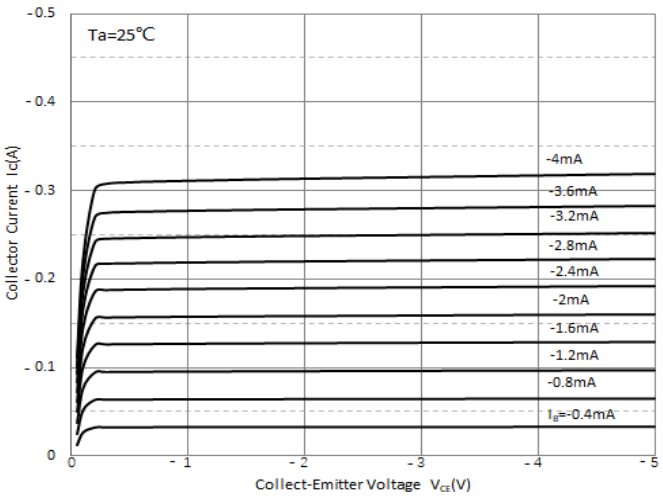
Note1：Device mounted on PCB with minimum recommended pad layout and additional heat sink (25mm x 23mm x 15mm) attached.

■ Electrical Characteristics (Ta=25℃ unless otherwise noted)

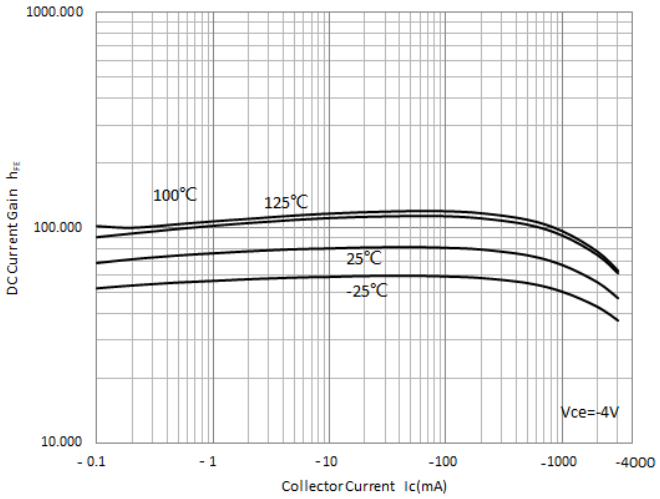
Item	Symbol	Unit	Conditions	Min	Typ	Max
Collector-base breakdown voltage	$V_{(BR)CBO}$	V	I_C= -100uA, I_E=0	-100		
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	V	I_C= -30mA, I_B=0	-100		
Emitter-base breakdown voltage	$V_{(BR)EBO}$	V	I_E= -1mA, I_C=0	-5		
Collector-base cut-off current	I_{CBO}	mA	V_{CB}=-100V			-0.1
Collector cutoff current	I_{CEO}	mA	V_{CE}=-60V			-0.7
Emitter-base cut-off current	I_{EBO}	mA	V_{EB}=-5V			-1
DC current gain	h_{FE}		V_{CE}= -4V, I_C= -0.3A	30		
			V_{CE}= -4V, I_C= -3A	15		75
Collector-emitter saturation voltage	$V_{CE(sat)}$	V	I_C= -6A, I_B= -0.6A			-1.5
Base-Emitter Voltage	V_{BE}	V	V_{CE}= -4V, I_C= -3A			-2.0
Collector-base output capacitance	Cob	pF	V_{CB}=-10V,I_E=0A,f=1MHz		96	

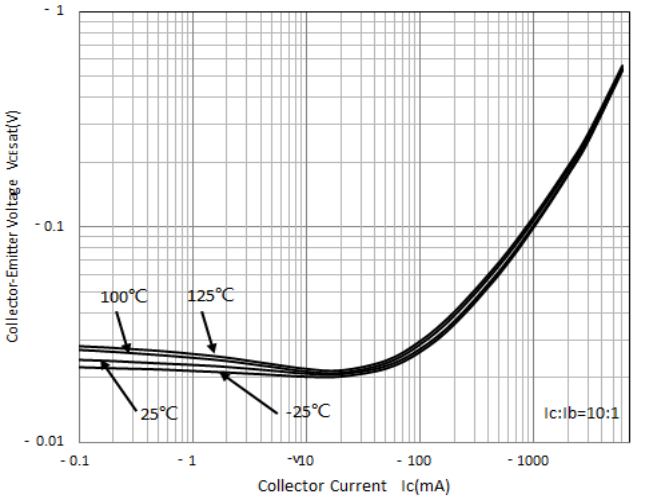
■ Characteristics(Typical)

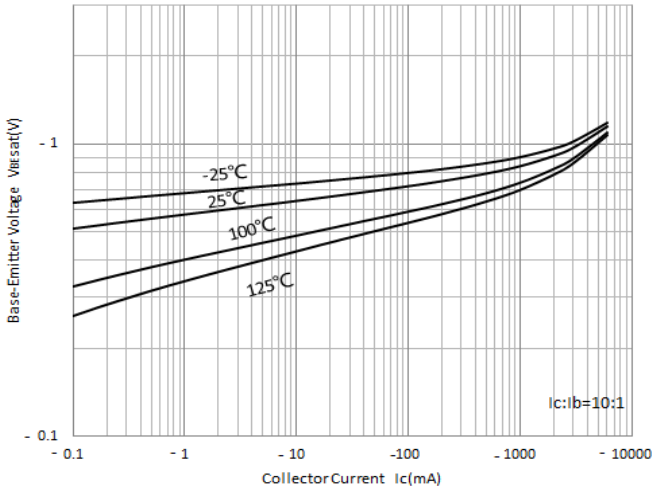


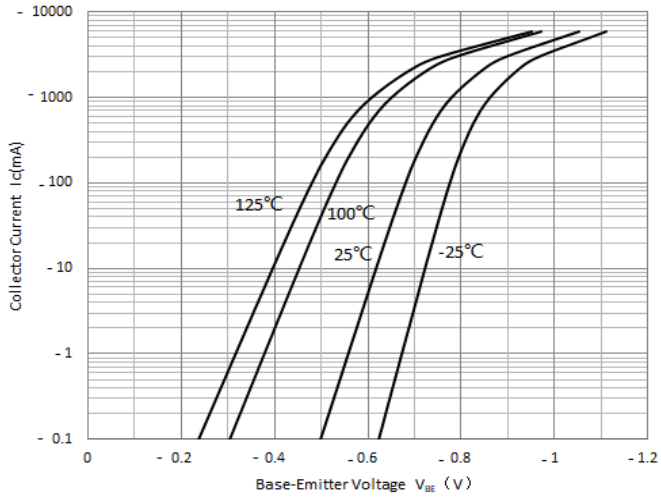


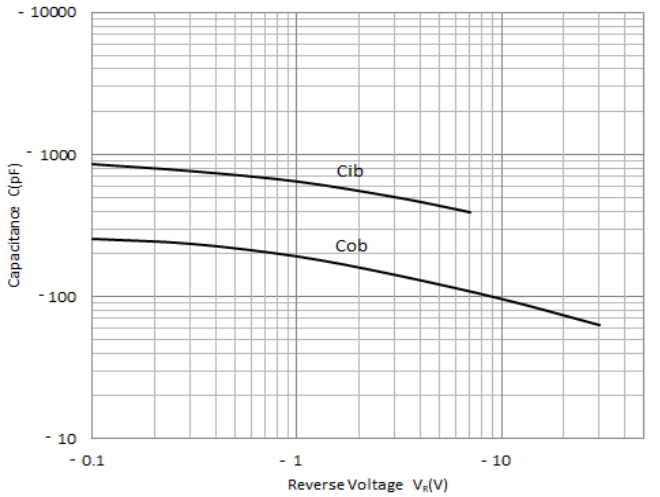
■ Characteristics(Typical)







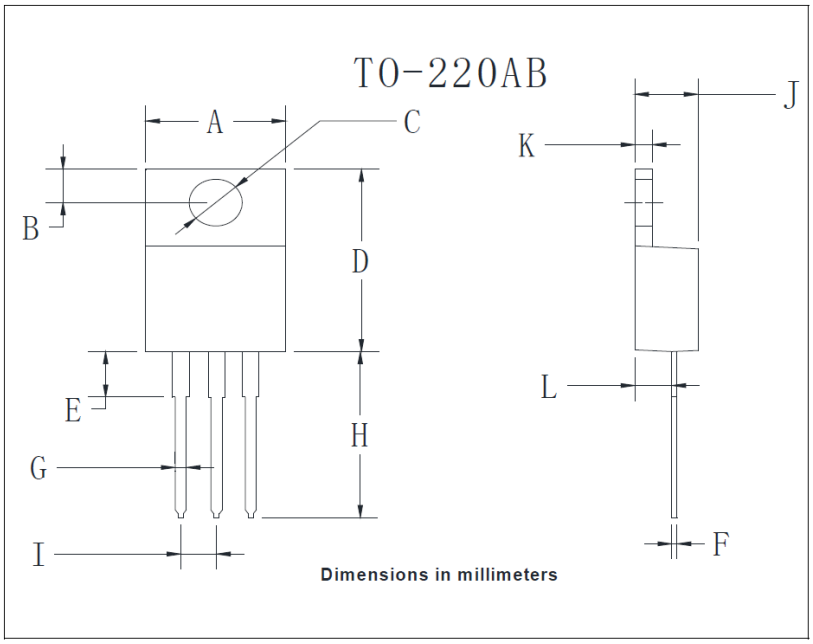




■ Ordering Information (Example)

PREFERED P/N	PACKING CODE	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
TIP42C	B1	50/Tube	1000	2000	Tube

■ TO-220AB Package information



TO-220AB		
Dim	Min	Max
A	9.95	10.35
B	2.55	2.95
C	3.8	4.0
D	14.95	15.25
E	3.75	4.25
F	0.26	0.5
G	0.68	0.94
H	13.4	13.9
I	2.35	2.65
J	4.38	4.78
K	1.14	1.4
L	2.37	2.79

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