

TO-220AB PNP Silicon Power Transistors

FEATURES

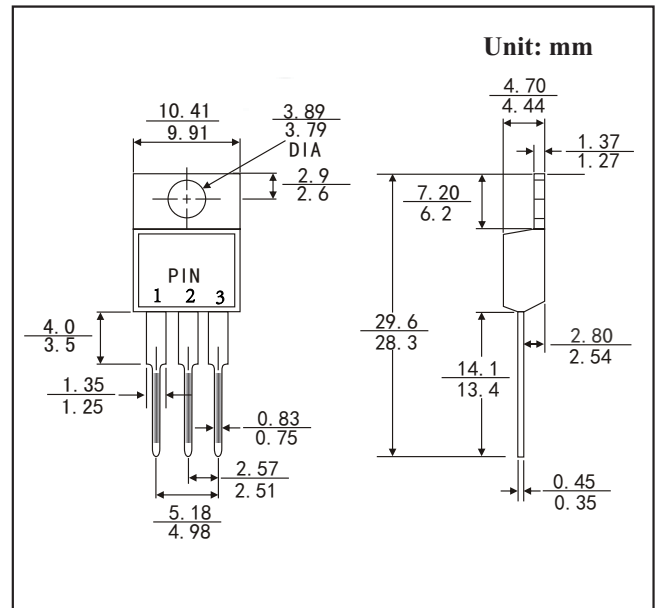
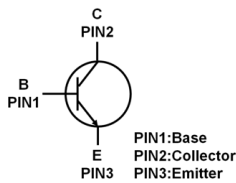
- Epoxy Meets UL 94 V-0 Flammability Rating

Applications

- High switching speed

Mechanical Data

- Package: TO-220AB
- Terminals: Tin plated leads, solderable per J-STD-002 and JESD22-B102



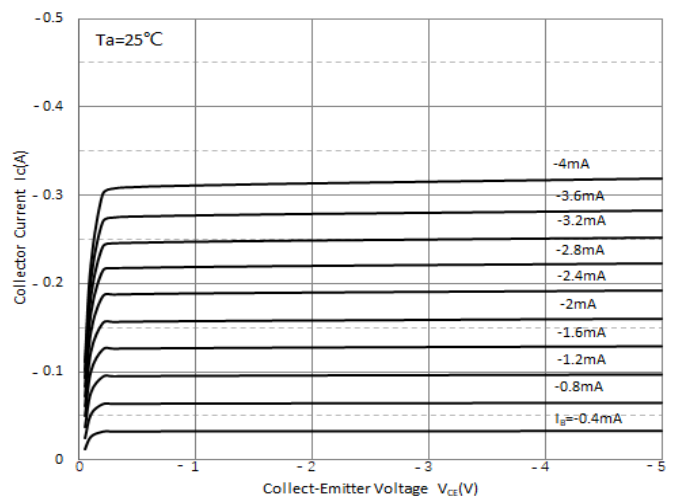
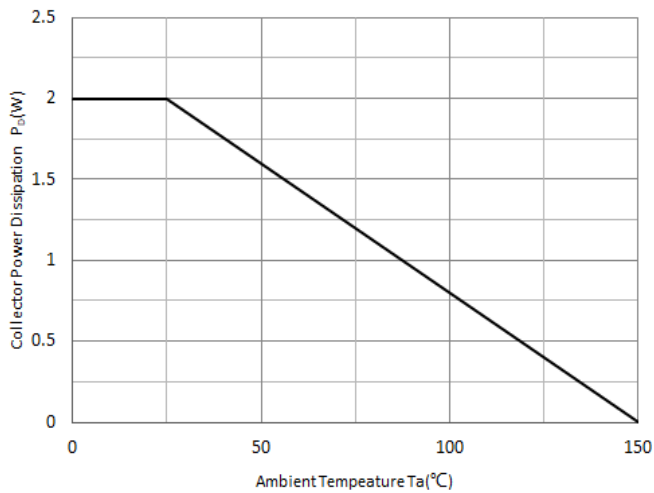
MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (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}	°C/W	62.5
Junction temperature	T_j	°C	-55 to +150
Storage temperature	T_{STG}	°C	-55 to +150

■ Electrical Characteristics (Ta=25°C unless otherwise noted)

Item	Symbol	Unit	Conditions	Min	Typ	Max
Collector-base breakdown voltage	$V_{(BR)CBO}$	V	$I_C = -100\mu A, I_E = 0$	-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	C_{ob}	pF	$V_{CB} = -10V, I_E = 0A, f = 1MHz$		96	

■ Characteristics(Typical)


■ Characteristics(Typical)

