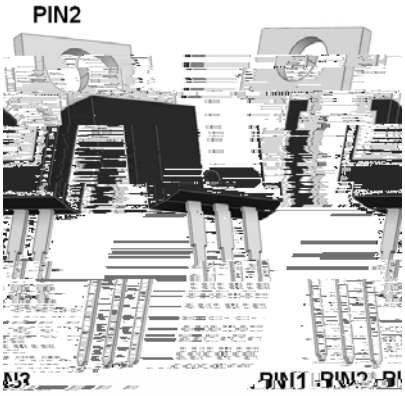
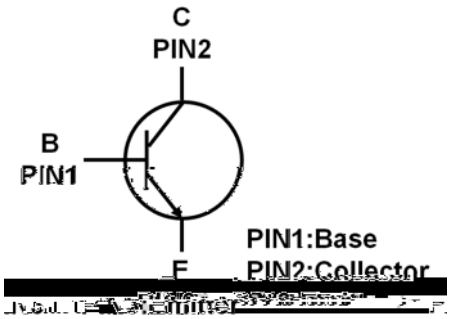
NPN Transistor





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

Applications
- Complement to TIP127L
- High DC Current Gain

Mehanical 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)

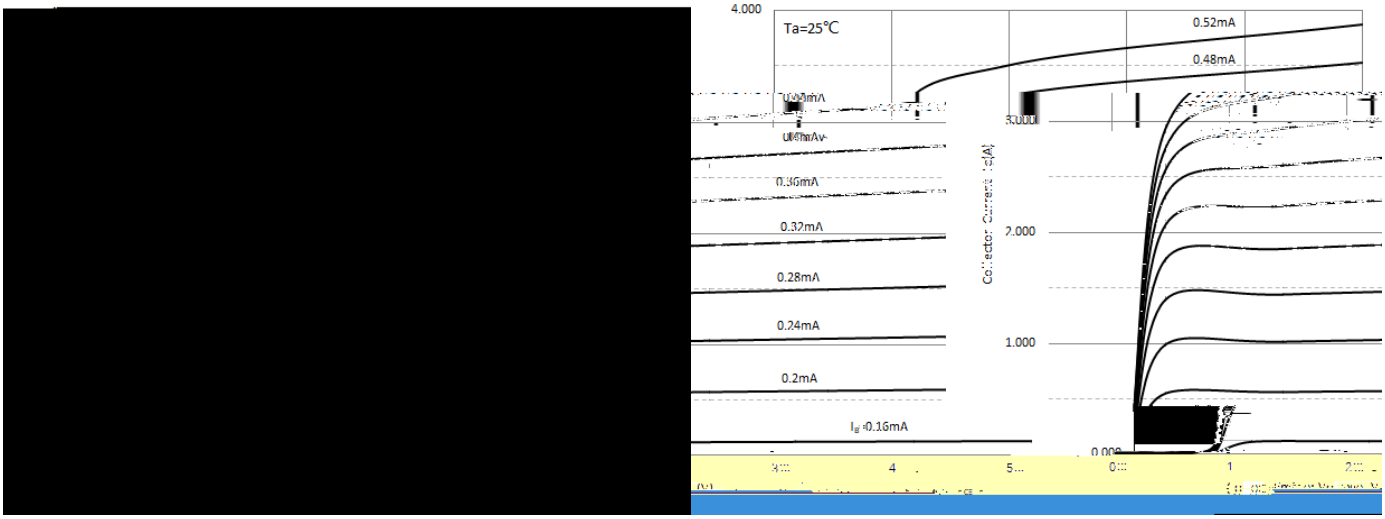
Item	Symbol	Unit	Value
Device marking code			TIP122L
Collector-base voltage	V_{CBO}	V	100
Collector-emitter voltage	V_{CEO}	V	100
Emitter-base voltage	V_{EBO}	V	5
Collector current	I_C	A	5
Power dissipation (*)	P_D	W	2
Thermal resistance, junction-to-ambient (*)	R_{thJA}	/W	35
Junction temperature	T_j		-55 to +150
Storage temperature	T_{STG}		-55 to +150

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

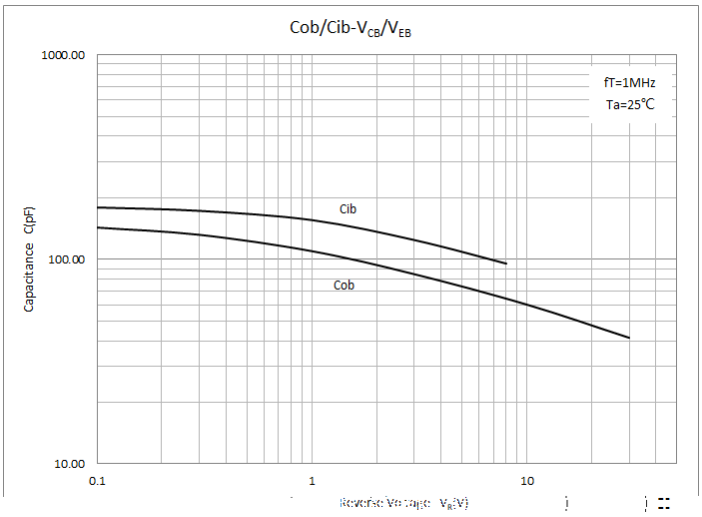
■ Electrical Characteristics (Ta=25 unless otherwise noted)

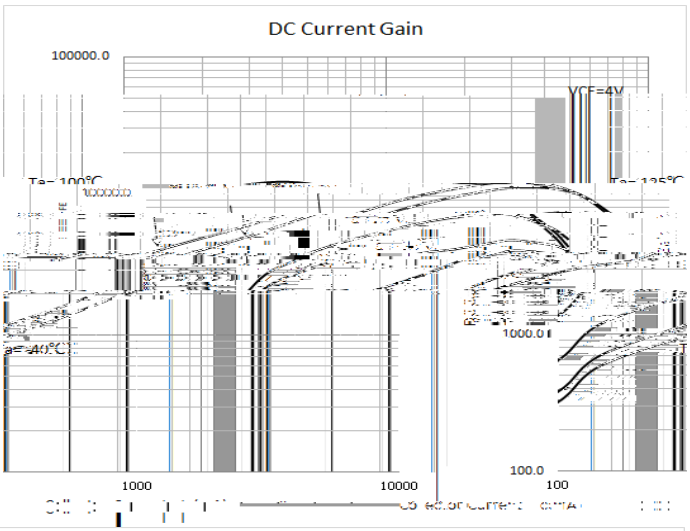
Item	Symbol	Unit	Conditions	Min	Typ	Max
Collector-base breakdown voltage	$V_{(BR)CBO}$	V	I_C= 1mA, I_E=0	100		
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	V	I_C= 30mA, I_B=0	100		
Emitter-base breakdown voltage	$V_{(BR)EBO}$	V	I_E= 2mA, I_C=0	5		
Collector-base cut-off current	I_{CBO}	mA	V_{CB}=100V			0.2
Collector cutoff current	I_{CEO}	mA	V_{CE}=50V			0.5
Emitter-base cut-off current	I_{EBO}	mA	V_{EB}=5V			2
DC current gain	h_{FE}		V_{CE}= 3V, I_C= 0.5A	1000		
			V_{CE}= 3V, I_C= 3A	1000		
Collector-emitter saturation voltage	$V_{CE(sat)}$	V	I_C= 3A, I_B= 12mA			2.0
			I_C=5A, I_B= 20mA			4.0
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	V	I_C= 3A, I_B= 12mA			3.0
			I_C= 5A, I_B= 20mA			4.0
Base-Emitter Voltage	V_{BE}	V	V_{CE}= 3V, I_C= 3A			2.5
Collector-base output capacitance	Cob	pF	V_{CB}=10V,I_E=0A,f=1MHz		60	

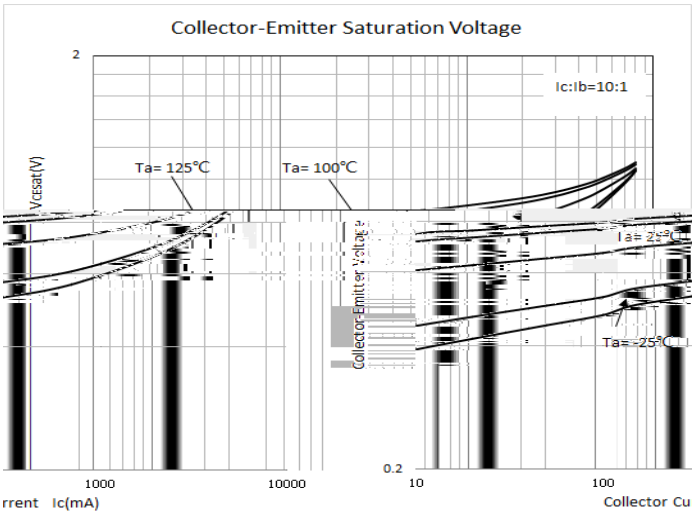
■ Characteristics(Typical)

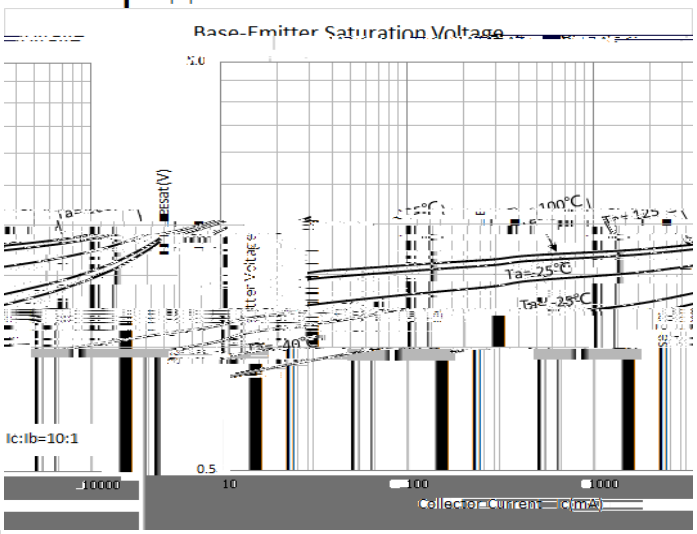


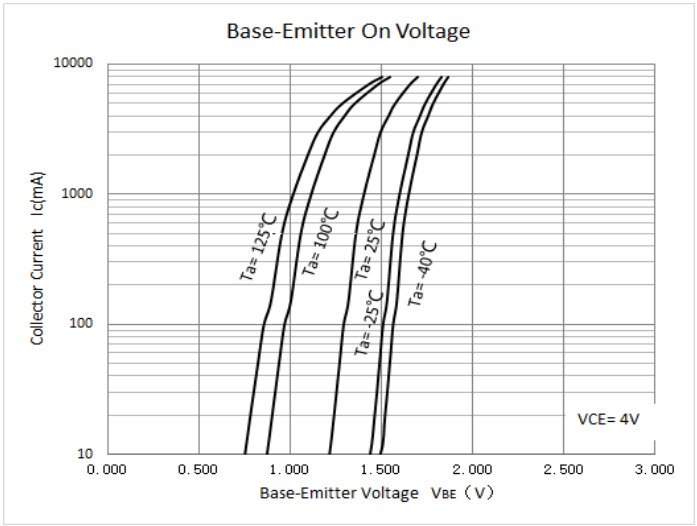
■ Characteristics(Typical)











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