

Features

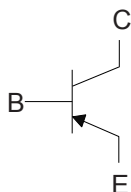
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Moisture Sensitivity Level 1
- Epoxy Meets UL 94 V-0 Flammability Rating
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)

Maximum Ratings @ 25°C Unless Otherwise Specified

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Thermal Resistance: 500°C/W Junction to Ambient

Parameter	Symbol	Rating	Unit
Collector-Base Voltage	V_{CBO}	-60	V
Collector-Emitter Voltage	V_{CEO}	-50	V
Emitter-Base Voltage	V_{EBO}	-5	V
Continuous Collector Current	I_C	-100	mA
Power Dissipation	P_D	250	mW

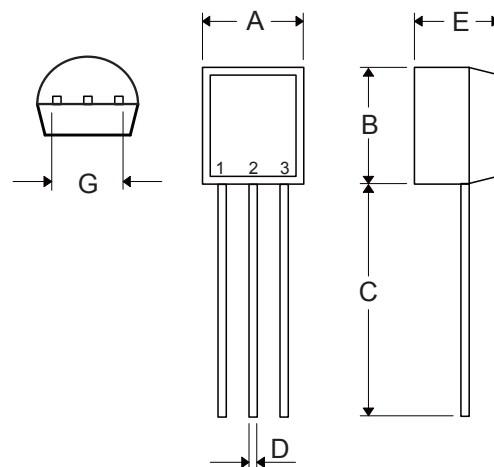
Internal Structure



1.EMITTER
2.COLLECTOR
3.BASE

**PNP Silicon
Plastic-Encapsulate
Transistor**

TO-92



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.169	0.185	4.30	4.70	
B	0.169	0.185	4.30	4.70	
C	0.500	-----	12.70	-----	
D	0.015	0.022	0.38	0.55	
E	0.130	0.146	3.30	3.70	
G	0.095	0.105	2.42	2.67	Straight Lead
	0.173	0.220	4.40	5.60	Bent

Electrical Characteristics @ T_A=25°C Unless Otherwise Specified

Parameter	Symbol	Min	Typ	Max	Units	Conditions
Collector-Base Breakdown Voltage	V _{(BR)CBO}	-60			V	I _C =-5μA, I _E =0
Collector-Emitter Breakdown Voltage	V _{(BR)CEO}	-50			V	I _C =-1mA, I _B =0
Emitter-Base Breakdown Voltage	V _{(BR)EBO}	-5			V	I _E =-50μA, I _C =0
Collector-Base Cutoff Current	I _{CBO}			-0.1	μA	V _{CB} =-60V, I _E =0
Emitter-Base Cutoff Current	I _{EBO}			-0.1	μA	V _{EB} =-5V, I _C =0
DC Current Gain	h _{FE}	90		600		V _{CE} =-6V, I _C =-1mA
Collector-Emitter Saturation Voltage	V _{CE(sat)}		-0.18	-0.30	V	I _C =-100mA, I _B =-10mA
Transition Frequency	f _T	100			MHz	V _{CE} =-6V, I _C =-10mA
Collector Output Capacitance	C _{ob}			6	pF	V _{CB} =-10V, I _E =0, f=1MHz
Noise Figure	N _F			20	dB	V _{CE} =-6V, I _C =-0.3mA, f=100Hz, R _g =10KΩ

Classification of h_{FE}

Rank	R	Q	P	K
Range	90-180	135-270	200-400	300-600

Curve Characteristics

Fig. 1 - Static Characteristics

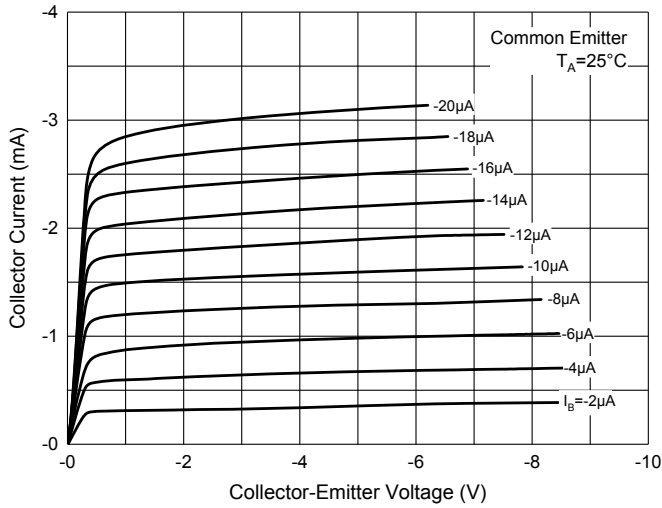


Fig. 2 - DC Current Gain Characteristics

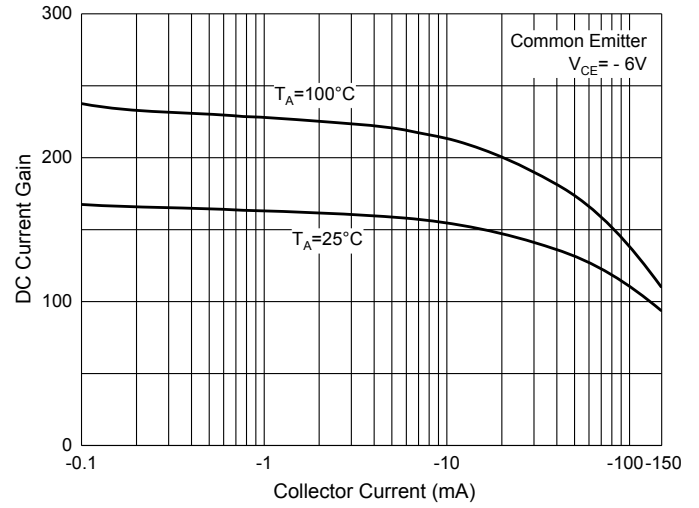


Fig. 3 - Collector-Emitter Saturation Voltage Characteristics

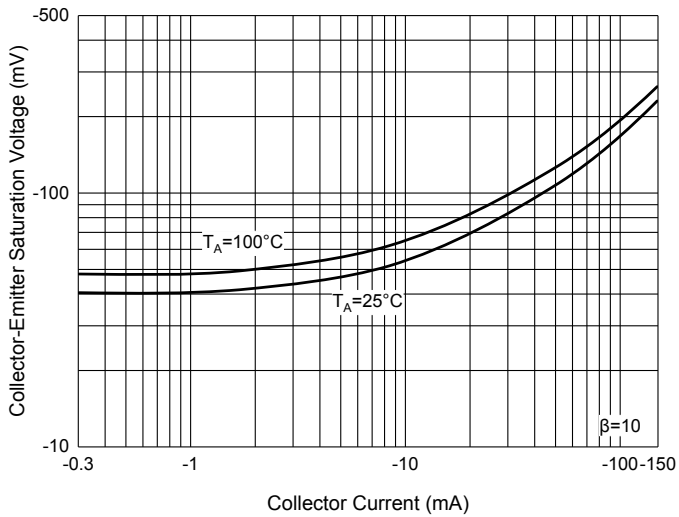


Fig. 4 - Base-Emitter Saturation Voltage Characteristics

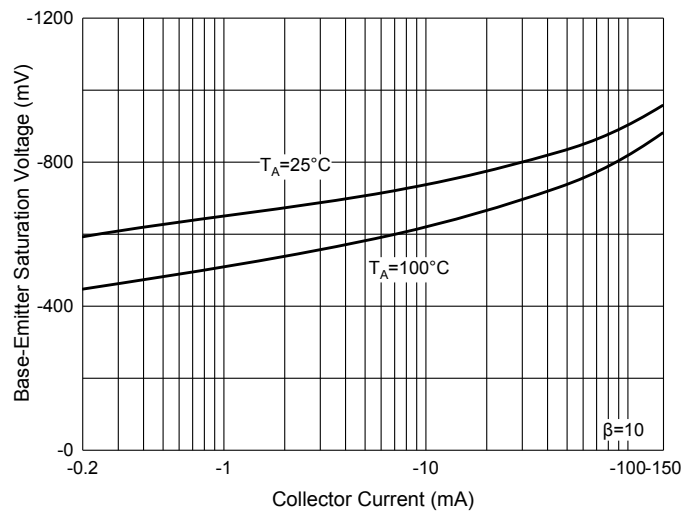


Fig. 5 - Base-Emitter Voltage Characteristics

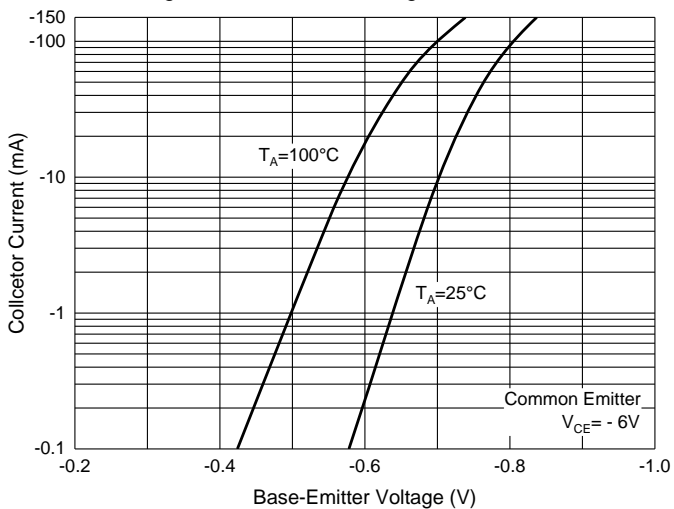
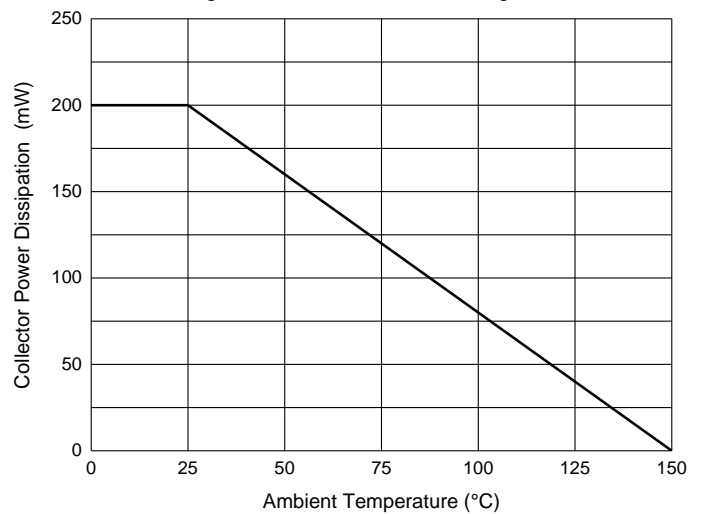


Fig. 6 - Collector Power Derating Curve



Ordering Information

Device	Packing
Part Number-AP	Ammo Packing: 20Kpcs/Carton
Part Number-BP	Bulk: 100Kpcs/Carton

Note : Adding "-HF" Suffix for Halogen Free, eg. Part Number-TP-HF

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