

Features

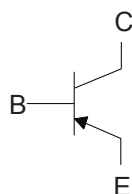
- Low Frequency Power Amplifier
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Moisture Sensitivity Level 1
- Epoxy Meets UL 94 V-0 Flammability Rating
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)

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: 167°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
Collector Current	I_C	-1	A
Power Dissipation	P_D	0.75	W

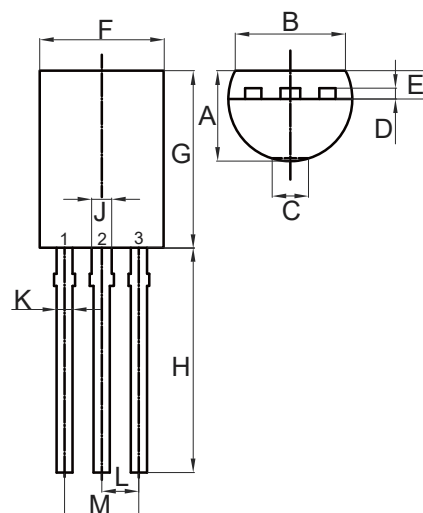
Internal Structure



1.EMITTER
2.COLLECTOR
3.BASE

PNP Epitaxial Silicon Transistor

TO-92L



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.146	0.161	3.70	4.10	
B	0.157	----	4.00	----	
C	0.000	0.063	0.00	1.60	
D	0.014	0.018	0.35	0.45	
E	0.050	0.062	1.28	1.58	
F	0.185	0.201	4.70	5.10	
G	0.307	0.323	7.80	8.20	
H	0.543	0.559	13.80	14.20	
J	0.024	0.031	0.60	0.80	
K	0.014	0.022	0.35	0.55	
L	0.050		1.27		Straight Lead
	0.086	0.110	2.20	2.80	Bent Lead
M	0.096	0.104	2.44	2.64	Straight Lead
	0.173	0.220	4.40	5.60	Bent Lead

Electrical Characteristics @ $T_A=25^\circ\text{C}$ Unless Otherwise Specified

Parameter	Symbol	Min	Typ	Max	Units	Conditions
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	-60			V	$I_C=-10\mu\text{A}, I_E=0$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	-50			V	$I_C=-2\text{mA}, I_B=0$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	-5			V	$I_E=-10\mu\text{A}, I_C=0$
Collector-Base Cutoff Current	I_{CBO}			-0.1	μA	$V_{CB}=-20\text{V}, I_E=0$
DC Current Gain	h_{FE}	85		340		$V_{CE}=-10\text{V}, I_C=-500\text{mA}$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$		-0.2	-0.4	V	$I_C=-500\text{mA}, I_B=-50\text{mA}$
Base-Emitter Saturation Voltage	$V_{BE(sat)}$		-0.85	-1.2	V	$I_C=-500\text{mA}, I_B=-50\text{mA}$
Transition Frequency	f_T		200		MHz	$V_{CE}=-10\text{V}, I_C=-50\text{mA}, f=200\text{MHz}$
Collector-Base Capacitance	C_{cb}		20	30	pF	$V_{CB}=-10\text{V}, I_E=0, f=1\text{MHz}$

Classification of h_{FE}

Rank	Q	R	S
Range	85-170	120-240	170-340

Curve Characteristics

Fig. 1 - Static Characteristics

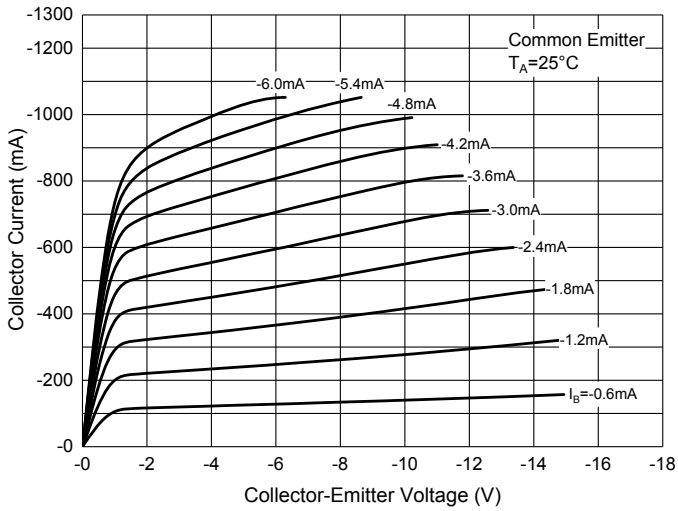


Fig. 2 - DC Current Gain Characteristics

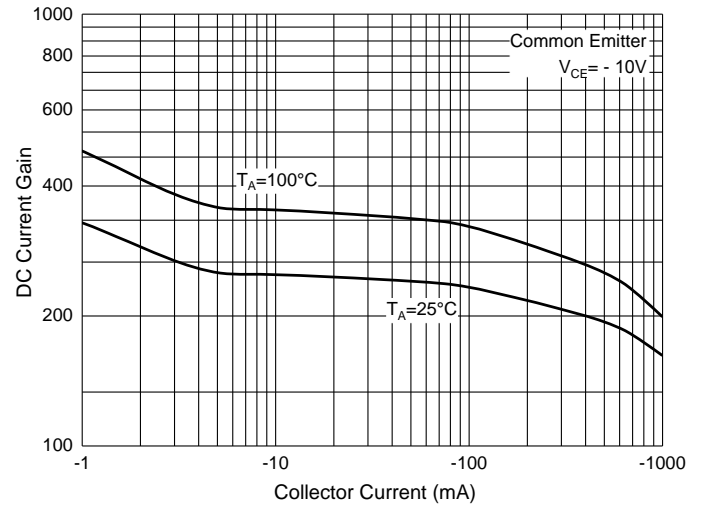


Fig. 3 - Base-Emitter Saturation Voltage Characteristics

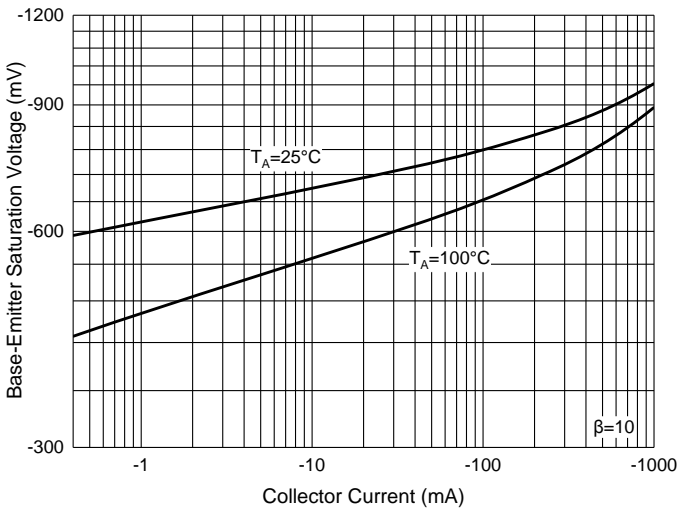


Fig. 4 - Collector-Emitter Saturation Voltage Characteristics

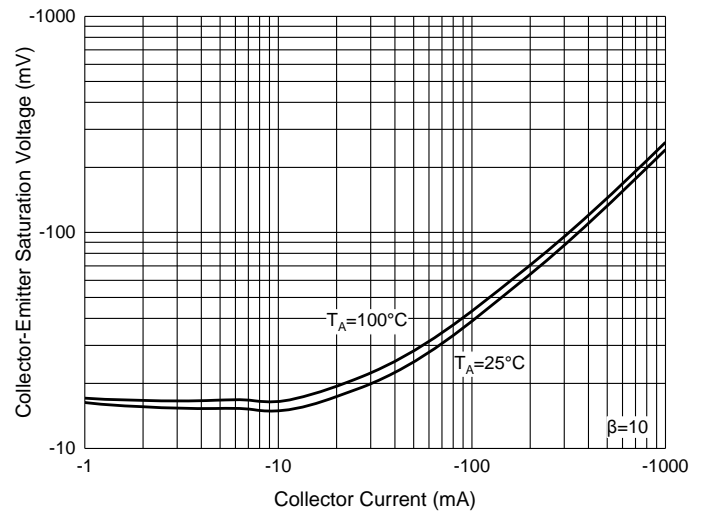


Fig. 5 - Base-Emitter Voltage Characteristics

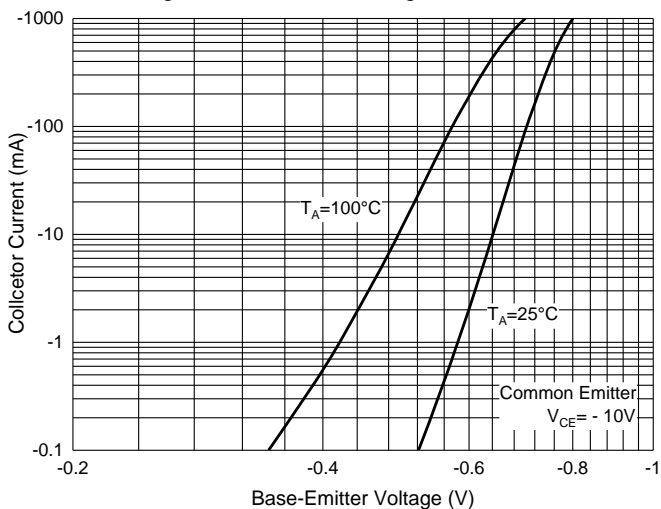
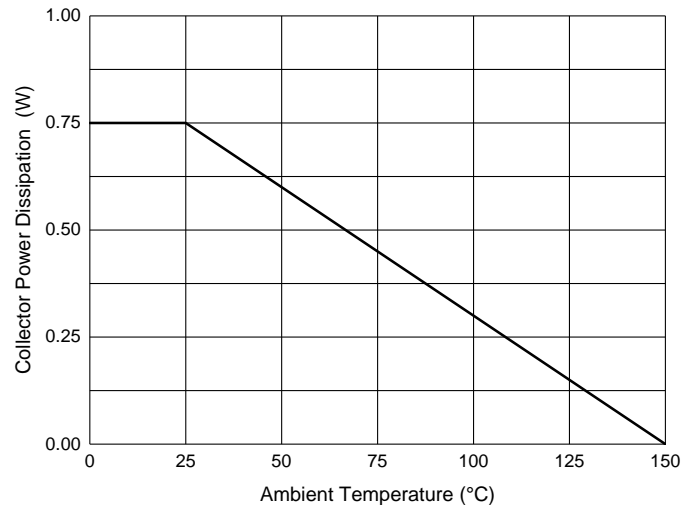


Fig. 6 - Collector Power Derating Curve



Ordering Information

Device	Packing
Part Number-AP	Ammo Packing: 2Kpcs/Ammo Box
Part Number-BP	Bulk: 50Kpcs/Carton

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

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