

### PNP Epitaxial Silicon Transistor

## Features

- Low Frequency Power Amplifier.
- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL Rating 1
- Halogen free available upon request by adding suffix "-HF"

## Maximum Ratings

Symbol	Rating	Rating	Unit
$V_{CEO}$	Collector-Emitter Voltage	-50	V
$V_{CBO}$	Collector-Base Voltage	-60	V
$V_{EBO}$	Emitter-Base Voltage	-5.0	V
$I_C$	Collector Current	-1.0	A
$P_C$	Collector power dissipation	0.75	W
$T_J$	Junction Temperature	-55 to +150	°C
$T_{STG}$	Storage Temperature	-55 to +150	°C

## Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Typ	Max	Units
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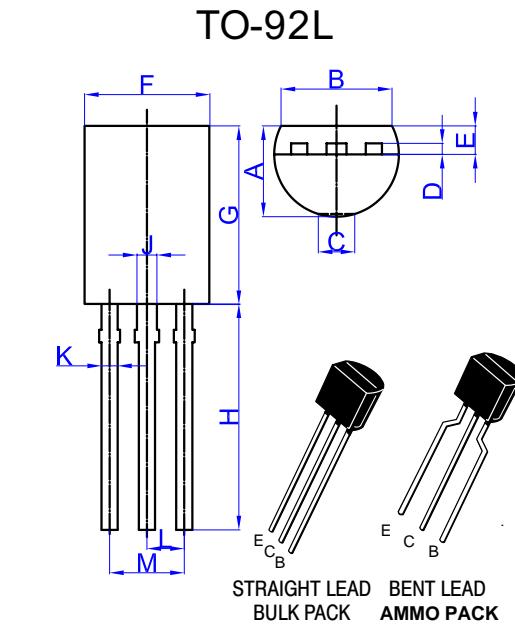
### OFF CHARACTERISTICS

$BV_{CBO}$	Collector-Base Breakdown Voltage ( $I_C=10\mu A$ dc, $I_E=0$ )	-60	---	---	Vdc
$BV_{CEO}$	Collector-Emitter Breakdown Voltage ( $I_C=2m$ Adc, $I_B=0$ )	-50	---	---	Vdc
$BV_{EBO}$	Emitter-Base Breakdown Voltage ( $I_E=10\mu A$ dc, $I_C=0$ )	-5.0	---	---	Vdc
$I_{CBO}$	Collector Cutoff Current ( $V_{CB}=-20$ Vdc, $I_E=0$ )	---	---	-100	nAdc

### ON CHARACTERISTICS

$h_{FE}$	DC Current gain ( $I_C=500m$ Adc, $V_{CE}=-10$ Vdc)	85	---	340	---
$V_{BE(sat)}$	Base-Emitter Saturation Voltage ( $I_B=50m$ Adc, $I_C=500m$ Adc)	---	-0.85	-1.2	Vdc
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage ( $I_C=500m$ Adc, $I_E=50m$ Adc)	---	-0.2	-0.4	Vdc
$f_T$	Current Gain Bandwidth Product ( $V_{CE}=-10$ Vdc, $I_C=50m$ Adc, $f=200$ MHz)	---	200	---	MHz
$C_{ob}$	Output Capacitance ( $V_{CB}=-10$ Vdc, $I_E=0$ , $f=1.0$ MHz)	---	20	30	pF

(1)  $h_{FE}$  Classification Q: 85~170, R: 120~240, S: 170~340



DIM	DIMENSIONS				NOTE
	MM	INCHES	MM	INCHES	
A	3.700	.146	4.100	.161	
B	4.000	.157	---	---	
C	0.000	0.000	0.300	0.012	
D	0.350	.014	0.450	.018	
E	1.280	.050	1.580	.062	
F	4.700	.185	5.100	.201	
G	7.800	.307	8.200	.323	
H	13.80	.543	14.20	.559	
J	.600	.024	.800	.031	
K	0.350	.014	.550	.022	
L	1.270	.050	2.200	.086	Straight Lead
	2.200	.086	2.800	.110	Bent Lead
M	2.440	.104	2.640	.096	Straight Lead
	4.400	.220	5.600	.173	Bent Lead

\* For ammo packing detailed specification, click here to visit our website of product packaging for details.

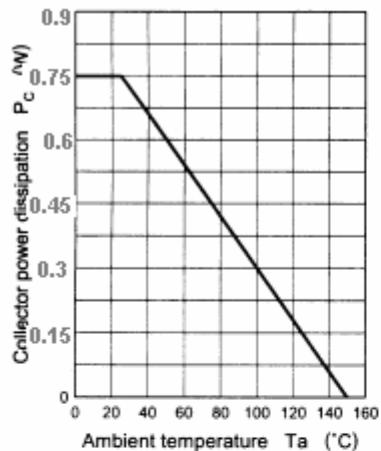
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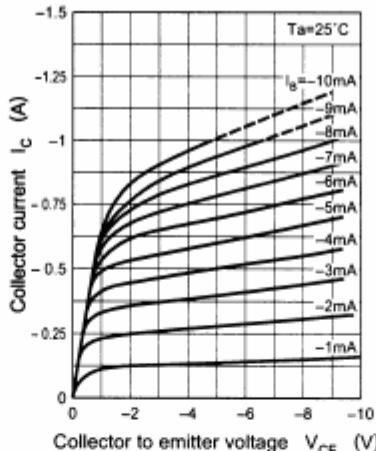
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## Typical Characteristics

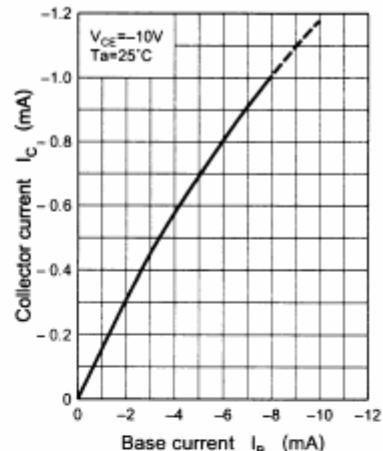
$P_C$  —  $T_a$



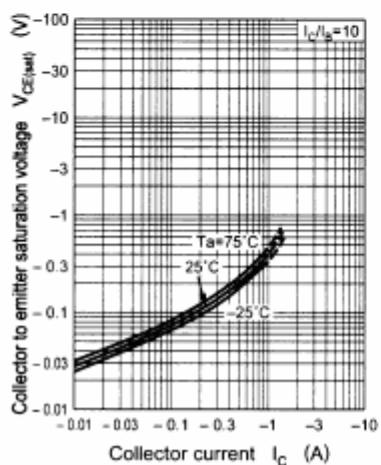
$I_C$  —  $V_{CE}$



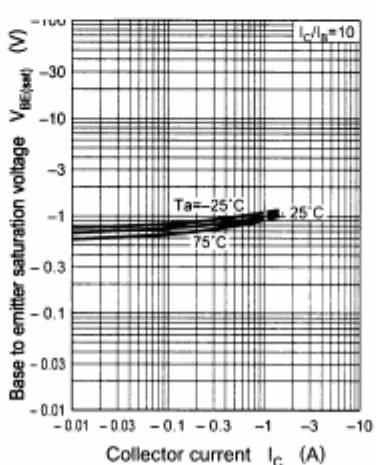
$I_C$  —  $I_B$



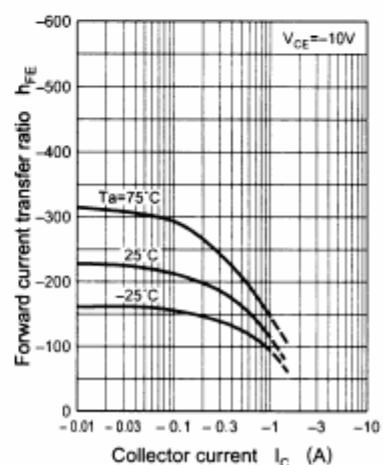
$V_{CE(sat)}$  —  $I_C$



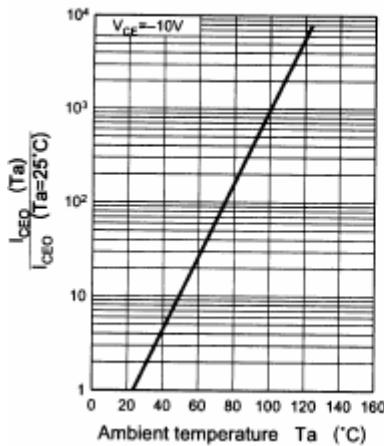
$V_{BE(sat)}$  —  $I_C$



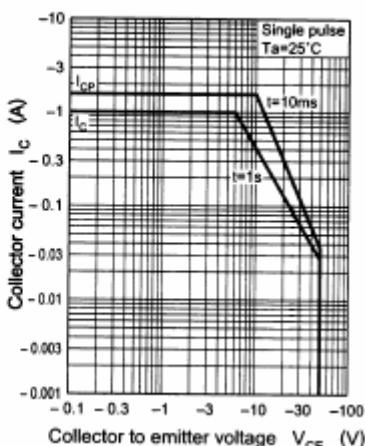
$h_{FE}$  —  $I_C$



$I_{CEO}$  —  $T_a$



Area of safe operation (ASO)



## 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-BP-HF

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