Micro Commercial Components

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MJE13001

NPN Silicon Plastic-Encapsulate Transistor

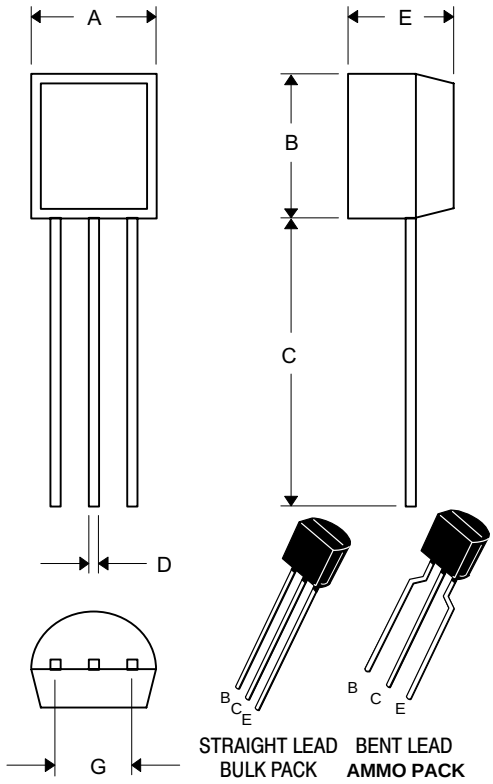
Features

- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Capable of 1.0Watts of Power Dissipation.
- Collector-current 0.2A
- Collector-base Voltage 600V
- Operating and storage junction temperature range: -55°C to +150°C
- Epoxy meets UL 94 V-0 flammability rating
- Moisure Sensitivity Level 1
- Marking: 13001
- Halogen free available upon request by adding suffix "-HF"

Electrical Characteristics @ 250C Unless Otherwise Specified

Symbol	Parameter	Min	Max	Units
OFF CHARACTERISTICS				
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage (I_C=1.0mAdc, I_B=0)	400		Vdc
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage (I_C=100uAdc, I_E=0)	600		Vdc
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage (I_E=100uAdc, I_C=0)	7.0		Vdc
I_{CBO}	Collector Cutoff Current (V_{CB}=600Vdc, I_E=0)		100	uAdc
I_{CEO}	Collector Cutoff Current (V_{CE}=400Vdc, I_B=0)		200	uAdc
I_{EBO}	Emitter Cutoff Current (V_{EB}=7.0Vdc, I_C=0)		100	uAdc
ON CHARACTERISTICS				
$h_{FE(1)}$	DC Current Gain (I_C=20mAdc, V_{CE}=20Vdc)	10	40	
$h_{FE(2)}$	DC Current Gain (I_C=0.25mAdc, V_{CE}=10Vdc)	5.0		
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage (I_C=50mAdc, I_B=10mAdc)		0.5	Vdc
$V_{BE(sat)}$	Base-Emitter Saturation Voltage (I_C=50mAdc, I_B=10mAdc)		1.2	Vdc
V_{BE}	Base-Emitter Voltage (I_E=100mAdc)		1.1	Vdc
SMALL-SIGNAL CHARACTERISTICS				
f_T	Transistor Frequency (I_C=20mAdc, V_{CE}=20Vdc, f=1.0MHz)	8.0		MHz
t_F	Fall Time (V_{CC}=45V, I_C=50mA, I_{B1}=I_{B2}=5.0mA)		0.3	uS
t_S	Storage Time		1.5	uS

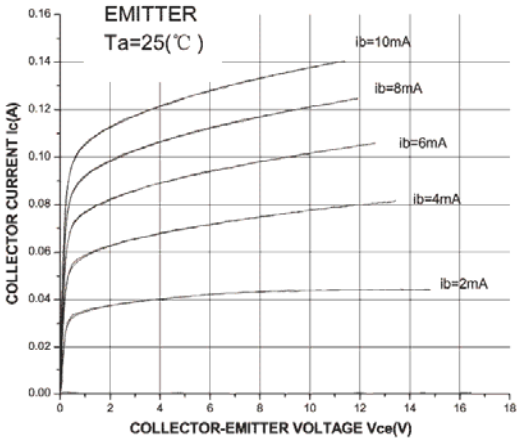
TO-92



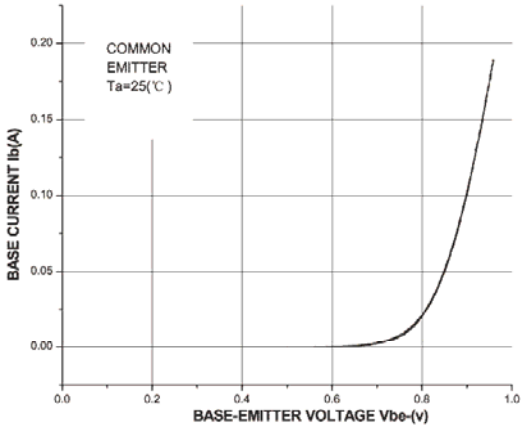
DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
A	.175	.185	4.45	4.70	
B	.175	.185	4.45	4.70	
C	.500	---	12.70	---	
D	.016	.020	0.41	0.63	
E	.135	.145	3.43	3.68	
G	.095	.105	2.42	2.67	Straight Lead
	.173	.220	4.40	5.60	Bent Lead

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

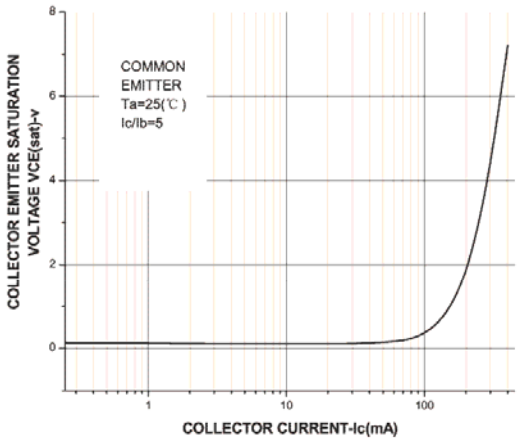
Ic-Vce



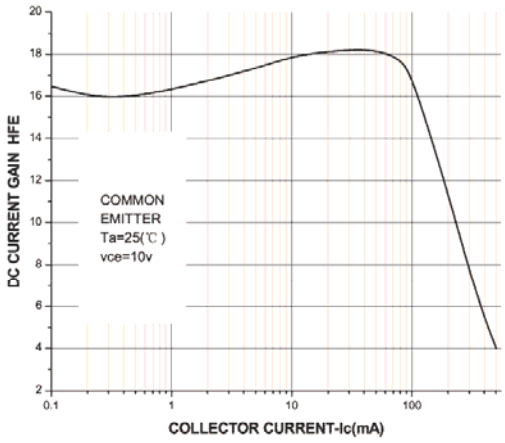
Ib-Vbe



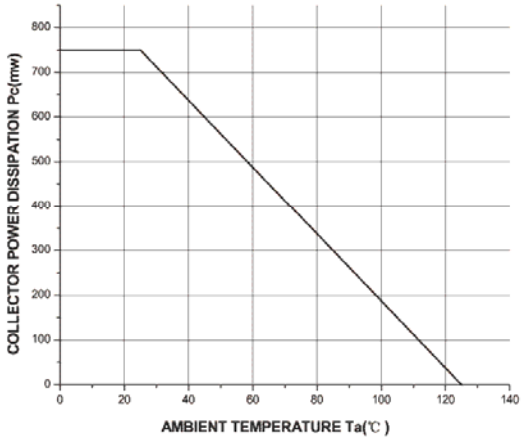
Vcesat-Ic



hFE-Ic



Pc-Ta



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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-AP-HF

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