



Micro Commercial Components

Micro Commercial Components
 20736 Marilla Street Chatsworth
 CA 91311
 Phone: (818) 701-4933
 Fax: (818) 701-4939

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
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL Rating 1
- Marking: 13001

Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Max	Units
--------	-----------	-----	-----	-------

OFF CHARACTERISTICS

$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage ($I_C=1.0mA$, $I_B=0$)	400		Vdc
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage ($I_C=100\mu A$, $I_E=0$)	600		Vdc
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage ($I_E=100\mu A$, $I_C=0$)	7.0		Vdc
I_{CBO}	Collector Cutoff Current ($V_{CB}=600Vdc$, $I_E=0$)		100	μA
I_{CEO}	Collector Cutoff Current ($V_{CE}=400Vdc$, $I_B=0$)		200	μA
I_{EBO}	Emitter Cutoff Current ($V_{EB}=7.0Vdc$, $I_C=0$)		100	μA

ON CHARACTERISTICS

$h_{FE(1)}$	DC Current Gain ($I_C=20mA$, $V_{CE}=20Vdc$)	10	40	
$h_{FE(2)}$	DC Current Gain ($I_C=0.25mA$, $V_{CE}=10Vdc$)	5.0		
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage ($I_C=50mA$, $I_B=10mA$)		0.5	Vdc
$V_{BE(sat)}$	Base-Emitter Saturation Voltage ($I_C=50mA$, $I_B=10mA$)		1.2	Vdc
V_{BE}	Base-Emitter Voltage ($I_E=100mA$)		1.1	Vdc

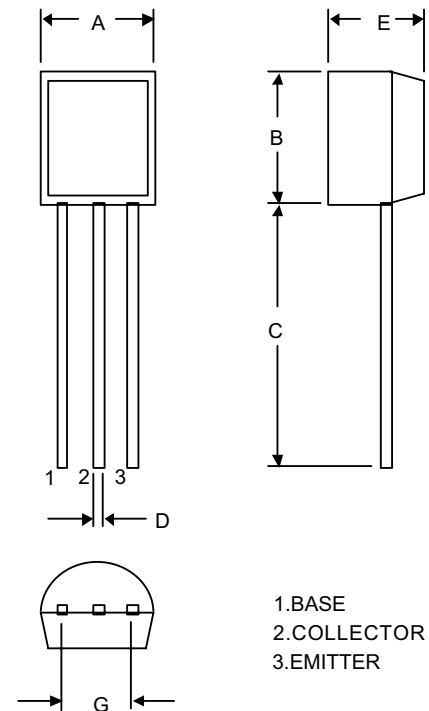
SMALL-SIGNAL CHARACTERISTICS

f_T	Transistor Frequency ($I_C=20mA$, $V_{CE}=20Vdc$, $f=1.0MHz$)	8.0		MHz
t_F	Fall Time $V_{CC}=45V$, $I_C=50mA$		0.3	μS
t_S	Storage Time $I_{B1}=I_{B2}=5.0mA$		1.5	μS

MJE13001

NPN Silicon Plastic-Encapsulate Transistor

TO-92

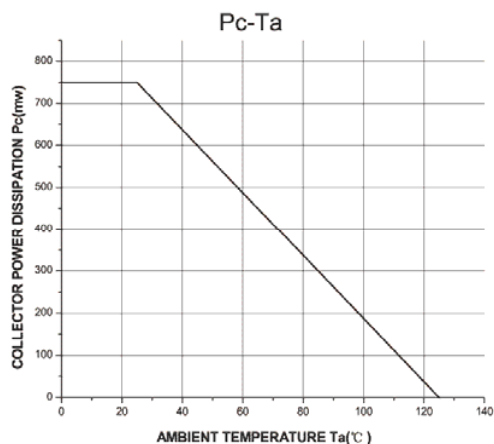
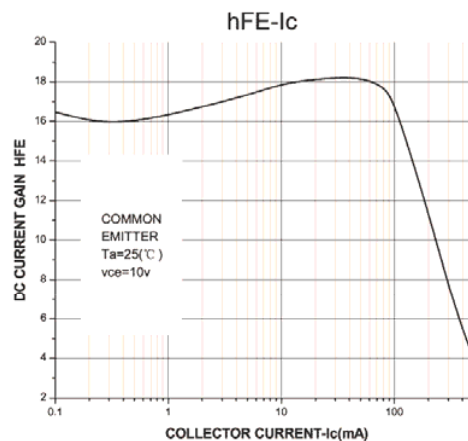
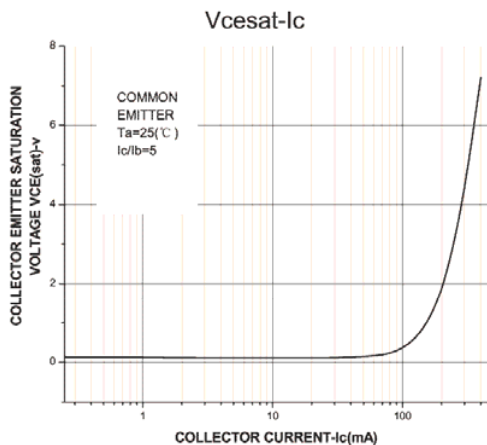
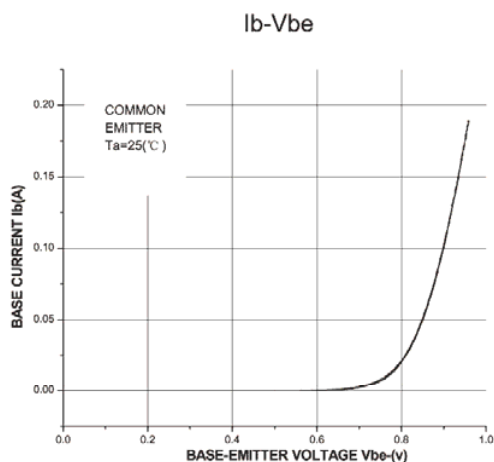
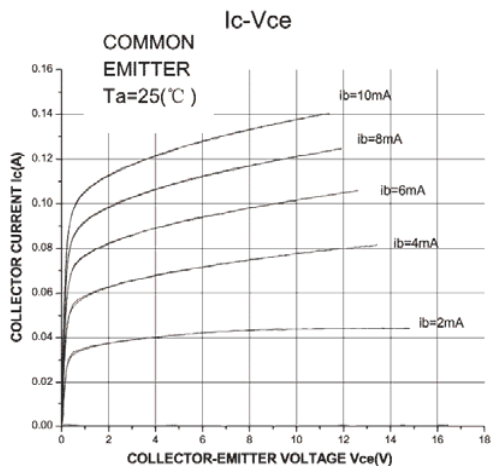


DIMENSIONS

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.175	.185	4.45	4.70	
B	.175	.185	4.46	4.70	
C	.500	---	12.7	---	
D	.016	.020	0.41	0.63	
E	.135	.145	3.43	3.68	
G	.095	.105	2.42	2.67	

www.mccsemi.com

MJE13001





Micro Commercial Components

Ordering Information

Device	Packing
(Part Number)-AP	Ammo Packing;2Kpcs/AmmoBox
(Part Number)-BP	Bulk;1Kpcs/Bag

IMPORTANT NOTICE

Micro Commercial Components Corp. reserves the right to make changes without further notice to any product herein to make corrections, modifications, enhancements, improvements, or other changes.

Micro Commercial Components Corp. does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights, nor the rights of others. The user of products in such applications shall assume all risks of such use and will agree to hold *Micro Commercial Components Corp.* and all the companies whose products are represented on our website, harmless against all damages.

APPLICATIONS DISCLAIMER

Products offer by *Micro Commercial Components Corp.* are not intended for use in Medical, Aerospace or Military Applications.

www.mccsemi.com