



Micro Commercial Components



Micro Commercial Components  
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# MJE13003B

## 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 1.5A
- Collector-base Voltage 700V
- Operating and storage junction temperature range: -55°C to +150°C
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Marking:3DD13003

### Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Max	Units
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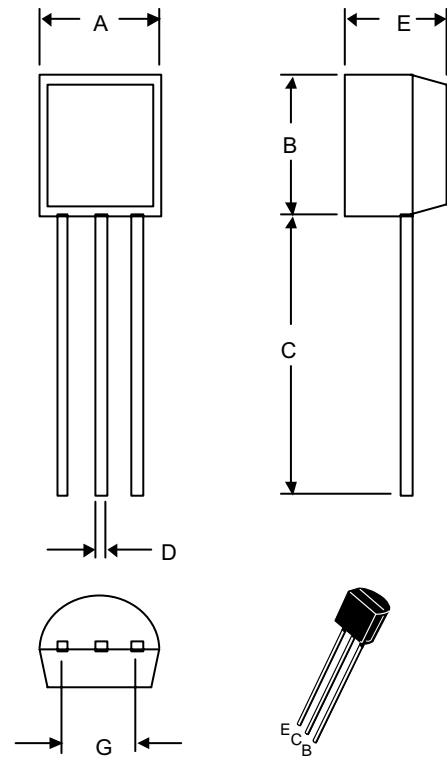
#### OFF CHARACTERISTICS

$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage ( $I_C=10mA$ , $I_B=0$ )	400		Vdc
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage ( $I_C=1000\mu A$ , $I_E=0$ )	700		Vdc
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage ( $I_E=1000\mu A$ , $I_C=0$ )	9.0		Vdc
$I_{CBO}$	Collector Cutoff Current ( $V_{CB}=700Vdc$ , $I_E=0$ )		1000	$\mu A$
$I_{CEO}$	Collector Cutoff Current ( $V_{CE}=400Vdc$ , $I_B=0$ )		500	$\mu A$
$I_{EBO}$	Emitter Cutoff Current ( $V_{EB}=7.0Vdc$ , $I_C=0$ )		100	$\mu A$

#### ON CHARACTERISTICS

$h_{FE}$	DC Current Gain ( $I_C=0.4A$ , $V_{CE}=10Vdc$ )	20	40	
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage ( $I_C=500mA$ , $I_B=100mA$ )		0.8	Vdc
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage ( $I_C=1500mA$ , $I_B=500mA$ )		3.0	Vdc
$V_{BE(sat)}$	Base-Emitter Saturation Voltage ( $I_C=500mA$ , $I_B=100mA$ )		1.0	Vdc

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DIM	DIMENSIONS				NOTE
	INCHES		MM		
A	.170	.190	4.33	4.83	
B	.170	.190	4.30	4.83	
C	.550	.590	13.97	14.97	
D	.010	.020	0.36	0.56	
E	.130	.160	3.30	3.96	
G	.096	.104	2.44	2.64	



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### Ordering Information :

Device	Packing
Part Number-AP	Ammo Packing: 2Kpcs/Ammo Box
Part Number-BP	Bulk: 100Kpcs/Carton

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