

**Micro Commercial Components** 



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## **MJE13007**

## Features

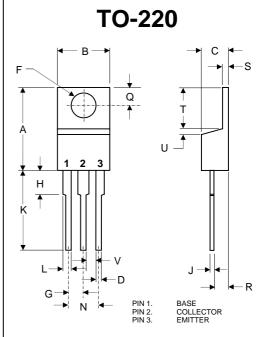
- Halogen free available upon request by adding suffix "-HF" Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates RoHS Compliant. See ordering information)
- Power dissipation: 2W (T<sub>A</sub>=25°C)
- Collector current: 8A
- Operating and storage junction temperature range T<sub>J</sub>, T<sub>stg</sub>: -55℃ +150℃
- Epoxy meets UL 94 V-0 flammability rating
- Moisure Sensitivity Level 1
- Mounting Torgue: 5 in-lbs Maximum

## Maximum Ratings @ 25°C Unless Otherwise Noted

Symbol	Rating		Type	Min	Max	Unit
V <sub>CEO</sub>	Collector-Emitter Breakdown			400		V
	Voltage (I <sub>C</sub> =10mA, I <sub>E</sub> =0)					
$V_{CBO}$	Collector-Base Breakdown			700		V
	Voltage					
	$(I_C=1mA, I_B=0)$					
$V_{EBO}$	Emitter-Base Breakdown Voltage			9.0		V
	$(I_E=1mA, I_C=0)$					
I <sub>CBO</sub>	Collector Cutoff Current				1	mA
	$(V_{CB}=700V,I_{E}=0)$					
I <sub>EBO</sub>	Emitter Cutoff Current				100	μA
	$(V_{BE}=9.0V,I_{C}=0)$					
$h_{FE}$	DC Current Gain			25	30	
	$(I_C=2.0A, V_{CE}=5.0V)$			5.0	30	
	( I <sub>C</sub> =5.0A,V <sub>CE</sub> =5.0V)					
$V_{CE(SAT)}$	Collector-Emitter Saturation				1.0	V
	Voltage					
	(I <sub>C</sub> =2.0A, I <sub>B</sub> =0.4A)					
$V_{BE(SAT)}$	Base-Emitter Saturation Voltage				1.2	V
	$(I_C=2.0A, I_B=0.4)$					
f⊤	$f_T$ Current Gain-Bandwidth Product $(I_C=500mA, V_{CE}=10V, f=1.0MH_Z)$			4.0		MHz
$C_{ob}$	Output Capacitance		80			pF
	(V <sub>CB</sub> =10V, I <sub>E</sub> =0, f=0.1MHz)					
tr	Fall Time	(V <sub>CC</sub> =125V,			0.7	μs
ts	Storage Time	$I_C=5.0A$ ,			3	us
ເວ	Ciorage Tille	$I_{B1} = -I_{B2} = 1.0A$			٦	μο

Notes:1.High Temperature Solder Exemption Applied, see EU Directive Annex 7.

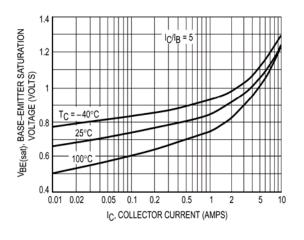
# **NPN Power Transistor** 8.0 Amperes 400 Volts 2 Watts

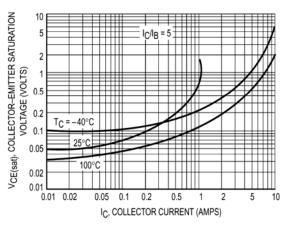


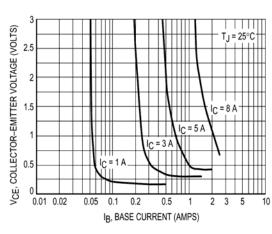
DIMENSIONS							
	INCHES		MM				
DIM	MIN	MAX	MIN	MAX	NOTE		
Α	.560	.625	14.22	15.88			
В	.380	.420	9.65	10.67			
С	.140	.190	3.56	4.82			
D	.020	.045	0.51	1.14			
F	.139	.161	3.53	4.09	Ø		
G	.190	.110	2.29	2.79			
Н		.250		6.35			
J	.012	.025	0.30	0.64			
K	.500	.580	12.70	14.73			
L	.045	.060	1.14	1.52			
N	.190	.210	4.83	5.33			
Q	.100	.135	2.54	3.43			
R	.080	.115	2.04	2.92			
S	.045	.055	1.14	1.39			
Т	.230	.270	5.84	6.86			
U		.050		1.27			
V	.045		1.15				

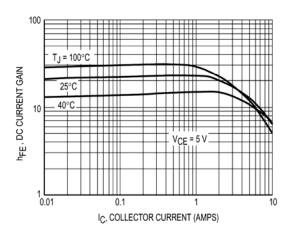


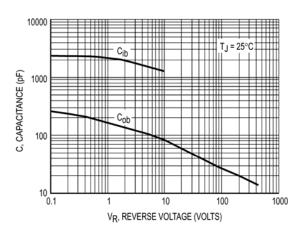
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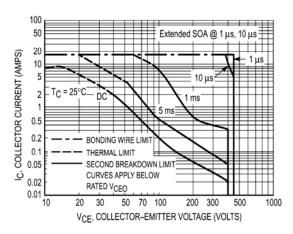














#### **Micro Commercial Components**

### **Ordering Information:**

Device	Packing
Part Number-BP	Bulk; 1Kpcs/Box

Note: Adding "-HF" suffix for halogen free, eg. Part Number-BP-HF

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