



Micro Commercial Components



Micro Commercial Components  
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## MJF15030-BS01

## Silicon Power Transistors 150 Volts

### Features

- General-purpose Amplifier and Switching Applications
- No Isolating Washers Required
- Reduced System Cost
- Special Marking: TLC
- Lead Free Finish/RoHS Compliant (Note1) ("P" Suffix designates RoHS Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

### Maximum Ratings @ 25°C Unless Otherwise Noted

Symbol	Rating	Value	Unit
$V_{CEO}$	Collector-Emitter Voltage	150	V
$V_{CBO}$	Collector-Base Voltage	150	V
$V_{EB}$	Emitter-Base Voltage	5.0	V
$I_C$	Collector Current- Continuous - Peak	8.0 16	A
$I_B$	Base Current	2.0	A
$P_D$	Total Power Dissipation* @ $T_C=25^\circ\text{C}$ @ $T_A=25^\circ\text{C}$	36 2.0	W
$T_J, T_{STG}$	Operating and Storage Temperature Range	-55~+150	$^\circ\text{C}$

### Thermal Characteristics

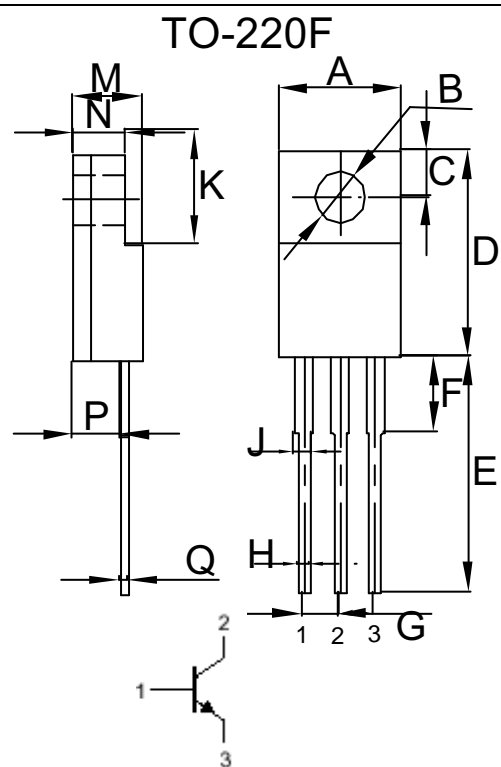
Symbol	Characteristic	Max	Unit
$R_{QJC}$	Thermal Resistance, Junction to Case*	3.5	$^\circ\text{C/W}$

\* Measurement made with thermocouple contacting the bottom insulated mounting surface (in a location beneath the die), the device mounted on a heatsink with thermal grease and a mounting torque of >6 in. lbs.

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

Symbol	Characteristic	Min	Max	Unit
$V_{CEO(SUS)}$	Collector-Emitter Sustaining Voltage ( $I_C=10\text{mA}, I_B=0$ )	150	-----	V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage ( $I_C=1.0\text{A}, I_B=0.1\text{A}$ )		0.5	V
$V_{BE}$	Emitter-Base on Voltage ( $I_C=1.0\text{A}, V_{CE}=2.0\text{V}$ )		1.0	V
$I_{CEO}$	Collector Cut-off Current ( $V_{CE}=150\text{V}, I_B=0$ )	----	10	$\mu\text{A}$
$I_{CBO}$	Collector Cut-off Current ( $V_{CB}=150\text{V}, I_E=0$ )	----	10	$\mu\text{A}$
$I_{EBO}$	Emitter Cut-off Current ( $V_{BE}=5.0\text{V}, I_C=0$ )	----	10	$\mu\text{A}$
$h_{FE}$	DC Current Gain ( $I_C=0.1\text{A}, V_{CE}=2.0\text{V}$ ) ( $I_C=2.0\text{A}, V_{CE}=2.0\text{V}$ ) ( $I_C=3.0\text{A}, V_{CE}=2.0\text{V}$ ) ( $I_C=4.0\text{A}, V_{CE}=2.0\text{V}$ )	40 40 40 20	-----	
$f_T$	Transition Frequency ( $I_C=500\text{mA}, V_{CE}=10\text{V}$ )	30	----	MHz

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



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.388	.407	9.85	10.35	
B	.128	.145	3.25	3.55	
C	.101	.111	2.57	2.83	
D	.570	.610	14.9	15.5	
E	.496	.520	12.6	13.2	
F	.148	.167	3.75	4.25	
G	.096	.101	2.44	2.57	
H	.019	.029	.47	.73	
J	.046	.056	1.17	1.43	
K	.266	.285	6.75	7.25	
M	.165	.190	4.25	4.75	
N	.110	.130	2.81	3.31	
P	.097	.107	2.72	2.48	
Q	.019	.029	.47	.73	

Ordering Information :

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

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