

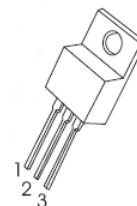
**MJE3055** TRANSISTOR (NPN)

**FEATURES**

- **General Purpose and Switching Applications**

**TO-220-3L**

1. BASE
2. COLLECTOR
3. EMITTER



**MAXIMUM RATINGS (T<sub>a</sub>=25°C unless otherwise noted)**

Symbol	Parameter	Value	Unit
V <sub>CB0</sub>	Collector-Base Voltage	70	V
V <sub>CEO</sub>	Collector-Emitter Voltage	60	V
V <sub>EBO</sub>	Emitter-Base Voltage	5	V
I <sub>C</sub>	Collector Current -Continuous	10	A
P <sub>C</sub>	Collector Power Dissipation	2	W
T <sub>j</sub> , T <sub>stg</sub>	Operation Junction and Storage Temperature Range	-55-150	°C

**ELECTRICAL CHARACTERISTICS (T<sub>a</sub>=25°C unless otherwise specified)**

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V <sub>(BR)CBO</sub>	I <sub>C</sub> =1mA, I <sub>E</sub> =0	70			V
Collector-emitter breakdown voltage	V <sub>(BR)CEO</sub>	I <sub>C</sub> =200mA, I <sub>B</sub> =0	60			V
Emitter-base breakdown voltage	V <sub>(BR)EBO</sub>	I <sub>E</sub> =1mA, I <sub>C</sub> =0	5			V
Collector cut-off current	I <sub>CB0</sub>	V <sub>CB</sub> =70V, I <sub>E</sub> =0			1	mA
Emitter cut-off current	I <sub>EBO</sub>	V <sub>EB</sub> =5V, I <sub>C</sub> =0			5	mA
DC current gain	h <sub>FE(1)</sub> *	V <sub>CE</sub> =4V, I <sub>C</sub> =4A	20		100	
	h <sub>FE(2)</sub> *	V <sub>CE</sub> =4V, I <sub>C</sub> =10A	5			
Collector-emitter saturation voltage	V <sub>CE(sat)</sub> *	I <sub>C</sub> =4A, I <sub>B</sub> =0.4A			1.1	V
	V <sub>CE(sat)</sub> *	I <sub>C</sub> =10A, I <sub>B</sub> =3.3A			8	V
Base-emitter voltage	V <sub>BE</sub> *	V <sub>CE</sub> =4V, I <sub>C</sub> =4A			1.8	V
Transition frequency	f <sub>T</sub>	V <sub>CE</sub> =10V, I <sub>C</sub> =0.5A	2			MHz

Note:\*Pulse test: t<sub>p</sub>≤300μS, δ≤0.02.

