

# 深圳市晶泰源电子有限公司

## MJE3055 TRANSISTOR (NPN)

### FEATURES

GENERAL PURPOSE AND SWITCHING APPLICATIONS.

### MAXIMUM RATINGS ( $T_A=25^{\circ}\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Units
$V_{CB0}$	Collector-Base Voltage	70	V
$V_{CE0}$	Collector-Emitter Voltage	60	V
$V_{EB0}$	Emitter-Base Voltage	5	V
$I_C$	Collector Current -Continuous	10	A
$P_C$	Collector Power Dissipation	2	W
$T_j$	Junction Temperature	150	$^{\circ}\text{C}$
$T_{stg}$	Storage Temperature Range	-55-150	$^{\circ}\text{C}$

### ELECTRICAL CHARACTERISTICS ( $T_{amb}=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=1\text{mA}, I_E=0$	70			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=200\text{mA}, I_B=0$	60			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=1\text{mA}, I_C=0$	5			V
Collector cut-off current	$I_{CBO}$	$V_{CB}=70\text{V}, I_E=0$			1	mA
Emitter cut-off current	$I_{EBO}$	$V_{EB}=5\text{V}, I_C=0$			5	mA
DC current gain	$h_{FE(1)}^*$	$V_{CE}=4\text{V}, I_C=4\text{A}$	20		100	
	$h_{FE(2)}^*$	$V_{CE}=4\text{V}, I_C=10\text{A}$	5			
Collector-emitter saturation voltage	$V_{CE(sat)}^*$	$I_C=4\text{A}, I_B=0.4\text{A}$			1.1	V
	$V_{CE(sat)}^*$	$I_C=10\text{A}, I_B=3.3\text{A}$			8	V
Base-emitter voltage	$V_{BE}^*$	$V_{CE}=4\text{V}, I_C=4\text{A}$			1.8	V
Transition frequency	$f_T$	$V_{CE}=10\text{V}, I_C=0.5\text{A}$	2			MHz

Note:\*Pulse test:  $t_p \leq 300\mu\text{s}$ ,  $\delta \leq 0.02$ .

