



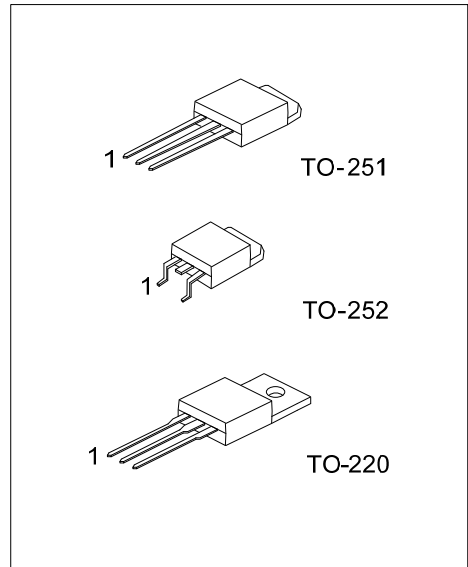
MJE3055T

NPN SILICON TRANSISTOR

HIGH VOLTAGE TRANSISTOR

DESCRIPTION

The UTC **MJE3055T** is designed for general purpose of amplifier and switching applications.



Lead-free: MJE3055TL
Halogen-free: MJE3055TG

ORDERING INFORMATION

Normal	Ordering Number		Package	Pin Assignment			Packing
	Lead Free Plating	Halogen Free		1	2	3	
MJE3055T-TA3-T	MJE3055TL-TA3-T	MJE3055TG-TA3-T	TO-220	B	C	E	Tube
MJE3055T-TM3-T	MJE3055TL-TM3-T	MJE3055TG-TM3-T	TO-251	B	C	E	Tube
MJE3055T-TN3-R	MJE3055TL-TN3-R	MJE3055TG-TN3-R	TO-252	B	C	E	Tape Reel

<p>MJE3055TL-TA3-T</p> <p>(1)Packing Type</p> <p>(2)Package Type</p> <p>(3)Lead Plating</p>	<p>(1) R: Tape Reel, T: Tube</p> <p>(2) TA3: TO-220, TM3: TO-251, TN3: TO-252</p> <p>(3)G: Halogen Free, L: Lead Free, Blank: Pb/Sn</p>
---	---

■ ABSOLUTE MAXIMUM RATINGS ($T_C=25^\circ\text{C}$, unless otherwise specified)

PARAMETER		SYMBOL	RATINGS	UNIT
Collector-Base Voltage		V_{CBO}	70	V
Collector-Emitter Voltage		V_{CEO}	60	V
Emitter-Base Voltage		V_{EBO}	5	V
Total Power Dissipation	TO-220	P_D	75	W
	TO-251/TO-252		20	W
Collector Current		I_C	10	A
Base Current		I_B	6	A
Junction Temperature		T_J	150	$^\circ\text{C}$
Storage Temperature		T_{STG}	-55 ~ +150	$^\circ\text{C}$

Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged.

Absolute maximum ratings are stress ratings only and functional device operation is not implied.

■ ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Emitter Breakdown Voltage	BV_{CEO}	$I_C=200\text{mA}$	60			V
Collector-Base Breakdown Voltage	BV_{CBO}	$I_C=10\text{mA}$	70			V
Emitter-Base Breakdown Voltage	BV_{EBO}	$I_E=10\text{mA}$	5			V
Collector Cut-off Current	I_{CBO}	$V_{CB}=70\text{V}$			1	mA
	I_{CEO}	$V_{CE}=30\text{V}$			700	μA
	I_{CEX}	$V_{CE}=70\text{V}, V_{EB(OFF)}=1.5\text{V}$			1	mA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=5\text{V}$			5	mA
Collector-Emitter Saturation Voltage (Note)	$V_{CE(SAT)1}$	$I_C=4\text{A}, I_B=0.4\text{A}$			1.1	V
	$V_{CE(SAT)2}$	$I_C=10\text{A}, I_B=3.3\text{A}$			8	V
Base-Emitter on Voltage	$V_{BE(ON)}$	$V_{CE}=4\text{V}, I_C=4\text{A}$			1.8	V
DC Current Gain (Note)	h_{FE1}	$V_{CE}=4\text{V}, I_C=4\text{A}$	20		100	
	h_{FE2}	$V_{CE}=4\text{V}, I_C=10\text{A}$	5			
Current Gain Bandwidth Product	f_T	$V_{CE}=10\text{V}, I_C=0.5\text{A}, f=1\text{MHz}$	2			MHZ

Note: Pulse test: $PW \leq 300\mu\text{s}$, duty cycle $\leq 2\%$ Pulse

UTC assumes no responsibility for equipment failures that result from using products at values that exceed, even momentarily, rated values (such as maximum ratings, operating condition ranges, or other parameters) listed in products specifications of any and all UTC products described or contained herein. UTC products are not designed for use in life support appliances, devices or systems where malfunction of these products can be reasonably expected to result in personal injury. Reproduction in whole or in part is prohibited without the prior written consent of the copyright owner. The information presented in this document does not form part of any quotation or contract, is believed to be accurate and reliable and may be changed without notice.