



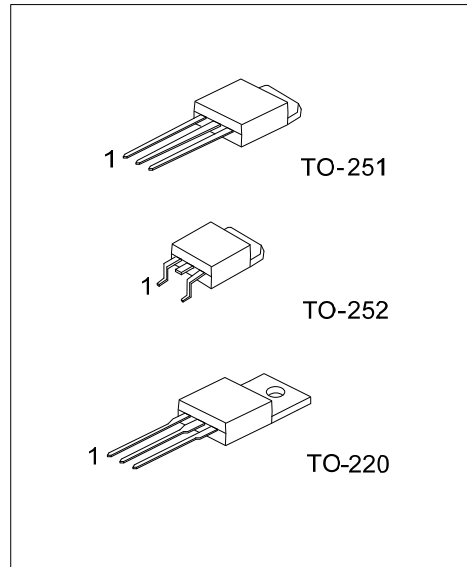
MJE3055T

NPN SILICON TRANSISTOR

HIGH VOLTAGE TRANSISTOR

DESCRIPTION

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



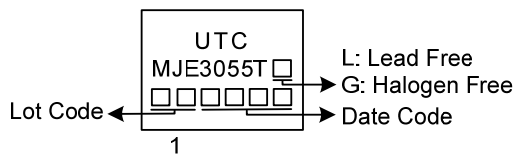
ORDERING INFORMATION

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

Note: Pin Assignment: B: Base C: Case E: Emitter

<p>MJE3055TG-TA3-T</p> <p>(1)Packing Type</p> <p>(2)Package Type</p> <p>(3)Green Package</p>	<p>(1) T: Tube, R: Tape Reel</p> <p>(2) TA3: TO-220, TM3: TO-251, TN3: TO-252</p> <p>(3) G: Halogen Free and Lead Free, L: Lead Free</p>
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MARKING



MJE3055T

NPN SILICON TRANSISTOR

■ 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.

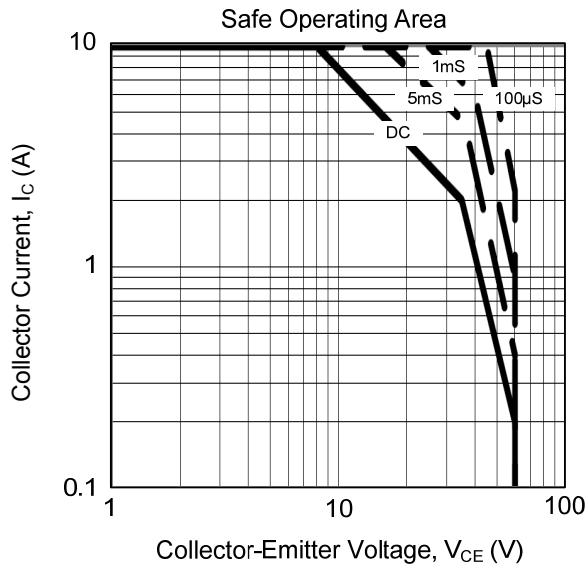
Absolute maximum ratings are stress ratings only and functional device operation is not implied.

■ 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: $P_W \leq 300\mu\text{s}$, duty cycle $\leq 2\%$.

■ TYPICAL CHARACTERISTICS



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. UTC reserves the right to make changes to information published in this document, including without limitation specifications and product descriptions, at any time and without notice. This document supersedes and replaces all information supplied prior to the publication hereof.