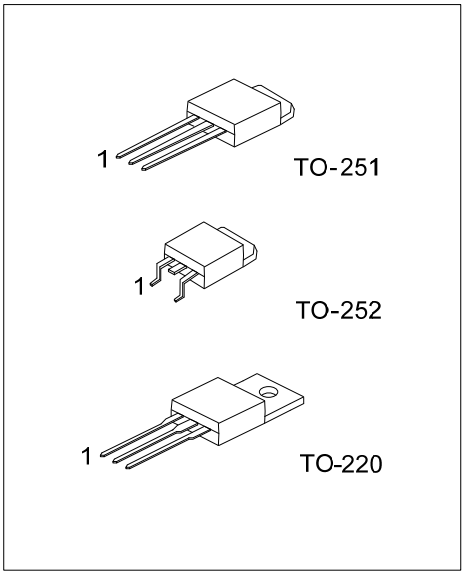
MJE3055T

NPN SILICON TRANSISTOR

HIGH VOLTAGE TRANSISTOR



■ DESCRIPTION

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

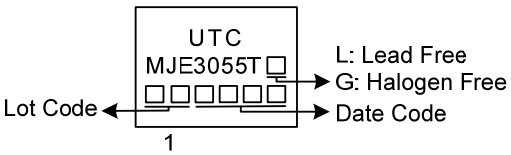
■ ORDERING INFORMATION

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

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

■ MARKING



■ ABSOLUTE MAXIMUM RATINGS (T_C=25°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	°C
Storage Temperature		T_{STG}	-55 ~ +150	°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 (Ta=25°C, unless otherwise specified)

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

Note: Pulse test: P_W ≤ 300μs, duty cycle ≤ 2%.

■ TYPICAL CHARACTERISTICS