

/ Descriptions

WR0553 M M E QSQ æ M y s ll 1 Silicon NPN transistor in a TO-220 Plastic Package.

/ Features

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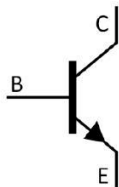
Large DC current($I_C=10A$),high f_T ($f_T\geq 2Mhz$).

/ Applications

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General purpose and switching applications.

/ Equivalent Circuit



/ Pinning



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PIN1 χ Base

PIN 2 χ Collector

PIN 3 χ Emitter

/ h_{FE} Classifications & Marking

ó M 1 3 " See Marking Instructions.

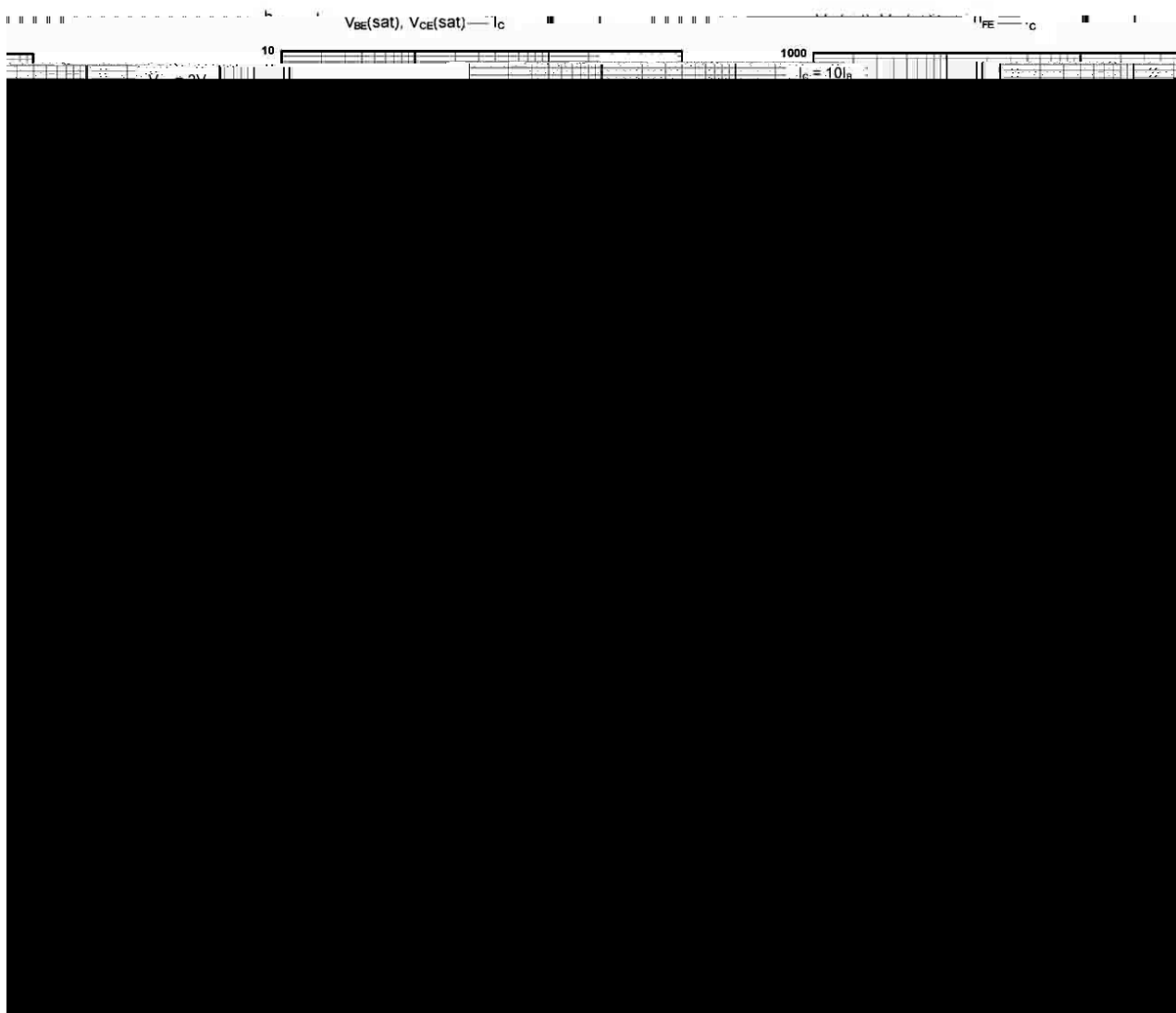

/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	70	V
Collector to Emitter Voltage	V_{CEO}	60	V
Emitter to Base Voltage	V_{EBO}	5.0	V
Collector Current - Continuous	I_C	10	A
Base Current - Continuous	I_B	6.0	A
Collector Power Dissipation	P_C	2.0	W
Collector Power Dissipation	$P_C(T_c=25)$	75	W
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 ~ 150	

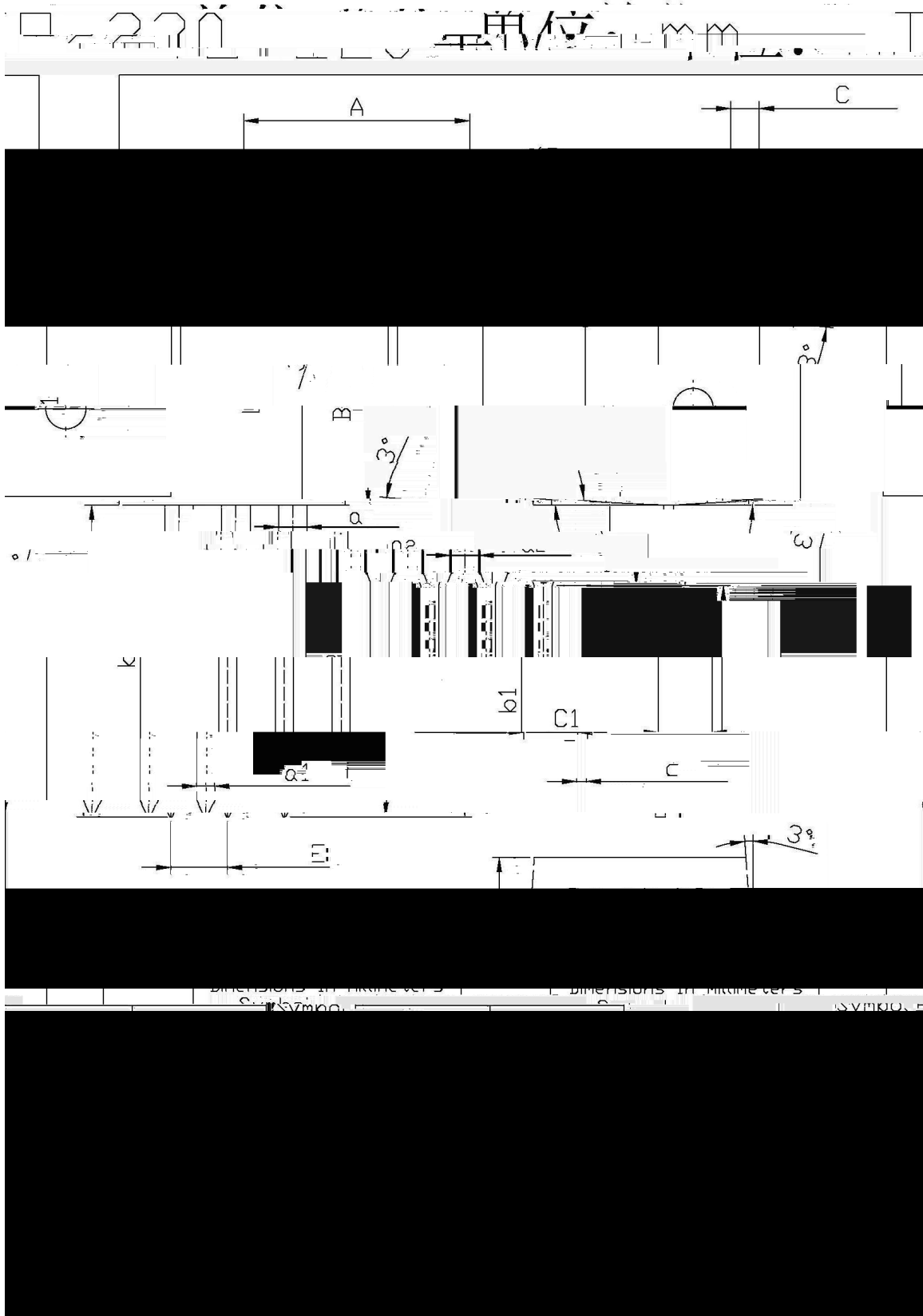
/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Ty10.1	Max	Unit
Collector to Emitter Breakdown Voltage	V_{CEO}	$I_C=200mA$ $I_B=0$	60			V
Collector Cut-Off Current	I_{CEO}	$V_{CE}=30V$ $I_B=0$			700	μA
Emitter Cut-Off Current	I_{EBO}	$V_{EB}=5.0V$ $I_C=0$			5.0	mA
Collector Cut-Off Current	I_{CEX}	$V_{BE(off)}=-1.5V$ $V_{CE}=70V$			1.0	mA
DC Current Gain	$h_{FE(1)}$	$V_{CE}=4.0V$ $I_C=4.0A$	20		100	
	$h_{FE(2)}$	$V_{CE}=4.0V$ $I_C=10A$	5.0			
Collector to Emitter Sat Voltage	$V_{CE(sat)(1)}$	$I_C=4.0A$ $I_B=0.4A$			1.1	V
	$V_{CE(sat)(2)}$	$I_C=10A$ $I_B=3.3A$			8.0	V
Base to Emitter On Voltage	$V_{BE(on)}$	$V_{CE}=4.0V$ $I_C=4.0A$			1.8	V
Transition Frequency	f_T	$V_{CE}=10V$ $I_C=500mA$	2.0			MHz

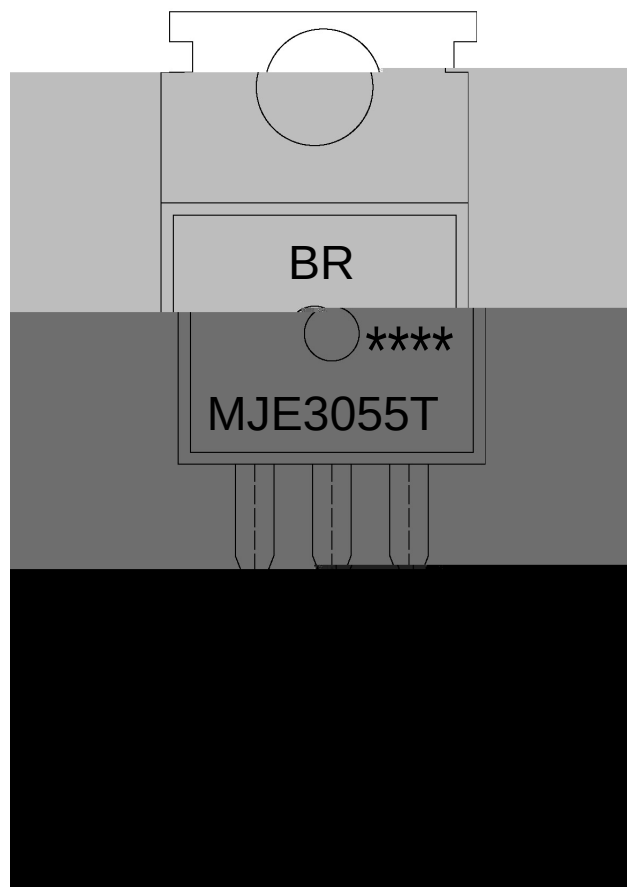
/ Electrical Characteristic Curve



/ Package Dimensions



/ Marking Instructions



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EU X Խ Յ Մ Ո

PMH6388W X Խ Բ Յ Ն

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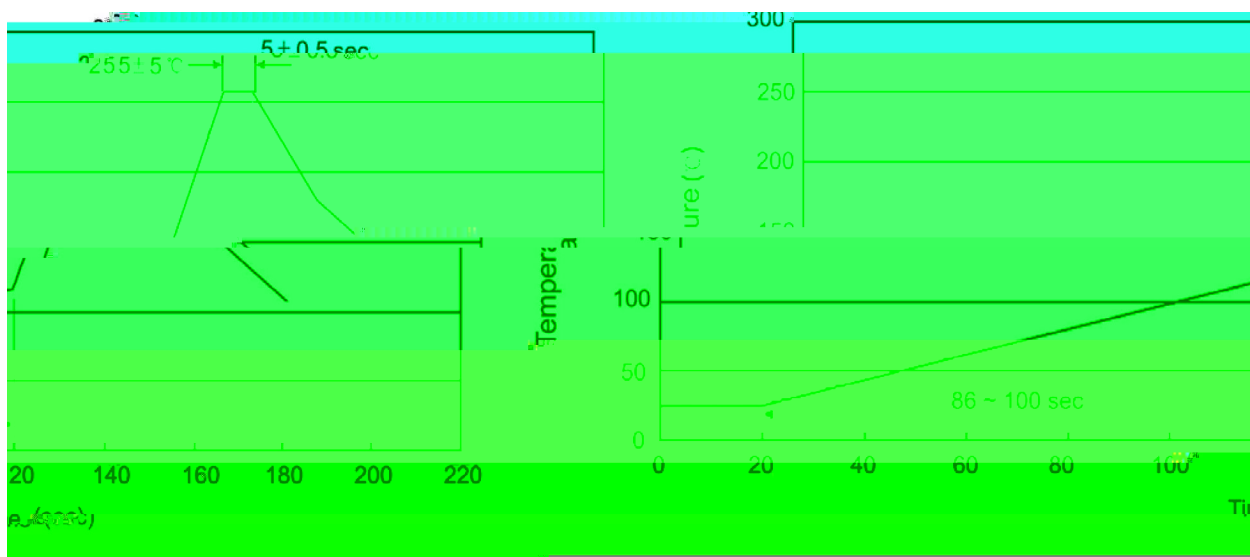
Note:

BR: Company Code

MJE3055T: Product Type.

****: Lot No. Code, code change with Lot No.

() / Temperature Profile for Dip Soldering(Pb-Free)



说明

1. 预加热: 25~150℃, 时间: 60~90sec;
2. 峰值温度: 255±5℃, 持续时间: 5±0.5sec;
3. 冷却速度: 2~10℃/sec.

Note:

1. Preheating: 25~150℃, Time: 60~90sec.
2. Peak Temp.: 255±5℃, Duration: 5±0.5sec.
3. Cooling Speed: 2~10℃/sec.

/ Resistance to Soldering Heat Test Conditions

温度: 270±5℃ 时间: 10±1 sec. Temp.: 270±5 Time: 10±1 sec

/ Packaging SPEC.

散装 / BULK

Package Type	Units					Dimension (unit: mm ³)		
	Units/Bag	Bags/Inner Box	Units/Inner Box	Inner Boxes/Outer Box	Units/Outer Box	Bag	Inner Box	Outer Box
TO-220/F	200	10	2,000	5	10,000	135×190	237×172×102	560×245×195

管装 / TUBE

Package Type	Units					Dimension (unit: mm ³)		
	Units/Tube	Tubes/Inner Box	Units/Inner Box	Inner Boxes/Outer Box	Units/Outer Box	Tube	Inner Box	Outer Box
TO-220/F	50	20	1,000	5	5,000	532×31.4×5.5	555×164×50	575×290×180

/ Notices