/ Descriptions

WR0553 Ṃ Ṃ Ꝉ QSQ Æ Ṁ ч s ǁ ᒣ Silicon NPN transistor in a TO-220 Plastic Package.

/ Features

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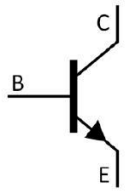
Large DC current(I_C=10A),high f_T(f_T≥2Mhz).

/ Applications

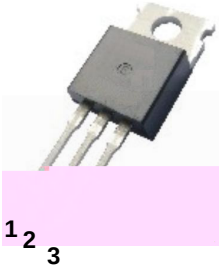
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General purpose and switching applications.

/ Equivalent Circuit



/ Pinning



PIN1 χ Base PIN 2 χ Collector PIN 3 χ Emitter

/ h_{FE} Classifications & Marking

ծ м ᒣ ب ˝ See Marking Instructions.

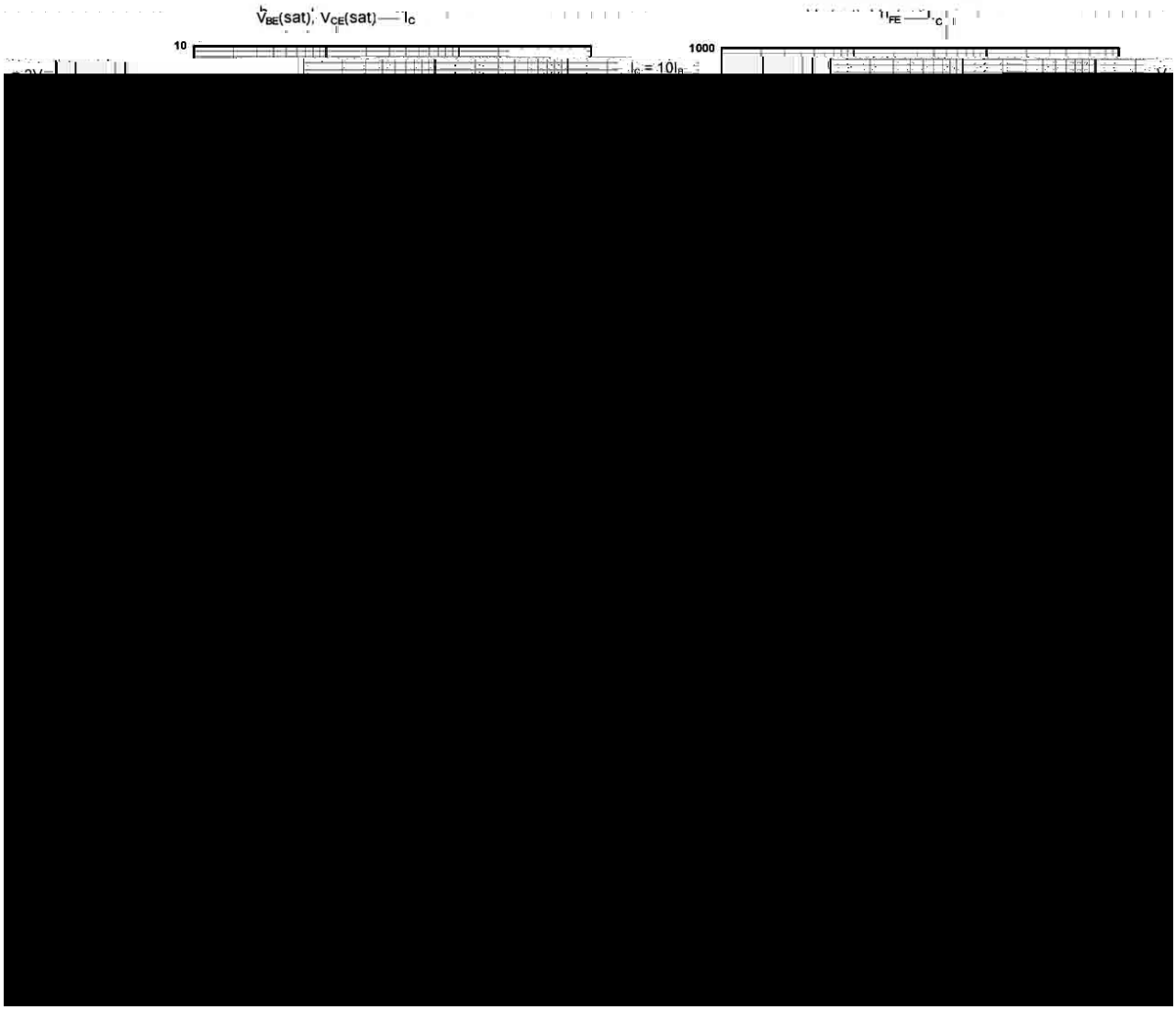
/ Absolute Maximum Ratings(Ta=25)

v ̈Ω Parameter	ϒ N Symbol	̈Ω Ö Rating	D Ч 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(Tc=25)	75	W
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

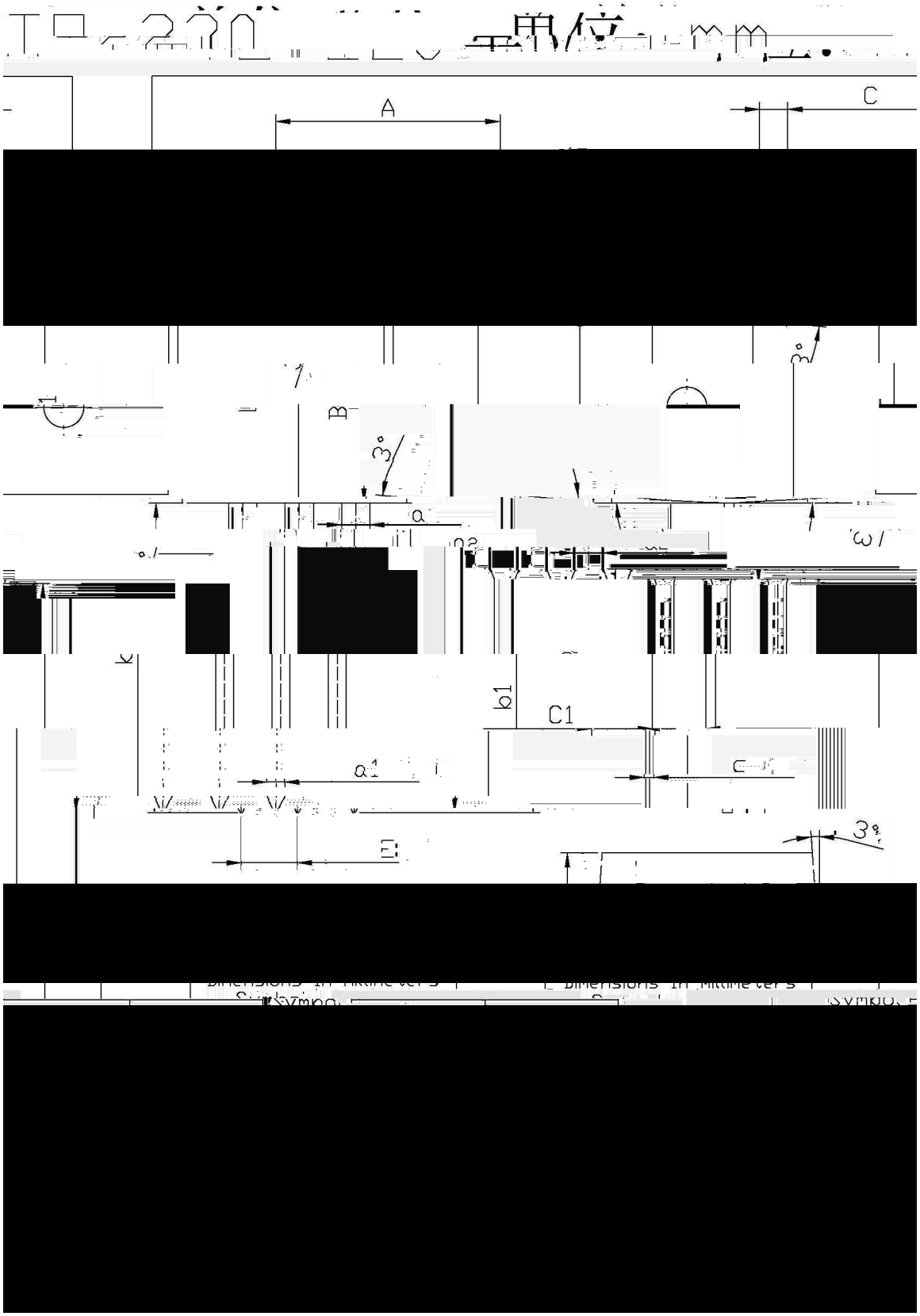
/ Electrical Characteristics(Ta=25)

v ̈Ω Parameter	ϒ N Symbol	Ш :ϯ ϒ Test Conditions	ω ņ Ö Min	Ε ʒ Ö Ty	ω ² Ö Max	D Ч Unit
Collector to Emitter Breakdown Voltage	V_{CEO}	I_C=200mA I_B=0	60			V
Collecor 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
Collecor 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 Sa 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

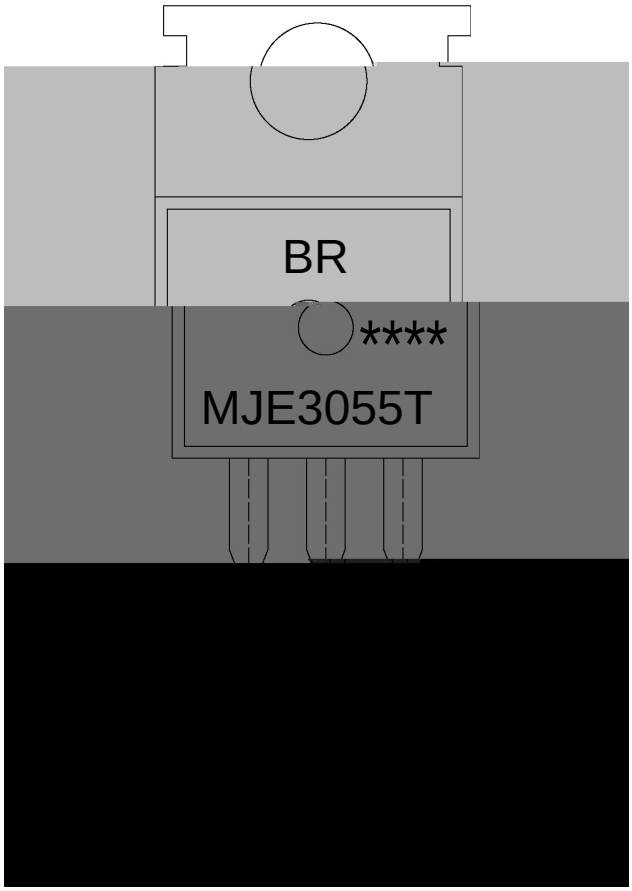
/ Electrical Characteristic Curve



/ Package Dimensions



/ Marking Instructions



EU χ	
PMH6388W χ	
---- χ	

Note:

BR:	Company Code
MJE3055T:	Product Type.
****:	Lot No. Code, code change with Lot No.

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



ب ˝ χ

1 Ĺ ♬ □ ў 25 Ќ 150 ł ı `H ڑ 60 Ќ 90sec;

2 Š Ө □ ў 255 ° 5 ł ı `H ڑ `Y ヵ ㎞ 5 ° 0.5sec;

3 ì ˙ ヽ ˛ ɔ ଌ ў ㎞ 2 Ќ 10 ł /sec.

Note:

1.Preheating:25~150 ł , Time:60~90sec.

2.Peak Temp.:255 ° 5 ł , Duration:5 ° 0.5sec.

3. Cooling Speed: 2~10 ł /sec.

/ Resistance to Soldering Heat Test Conditions

□ ў χ 270 ° 5 ł `H ڑ χ 10 ° 1 sec. Temp.:270±5 Time:10±1 sec

/ Packaging SPEC.

¨Ω ţ ץ Ł / BULK

Package Type	Units					Dimension		(unit mm³)
	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

˛ ヿ ץ Ł / TUBE

Package Type	Units					Dimension		(unit mm³)
	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