MJD253

Rev.E May.-2016

蓝箭电子 BLUE ROCKET ELECTRONICS

DATA SHEET

/ Descriptions

WR0585 ṂṂ Ḷ SQS ÆṀ ч s ‖ ㄱ Silicon PNP transistor in a TO-252 Plastic Package.

/ Features

Ӈ V_{CEO} ı ぇ ↄ ㄩ ч `

Low Collector−Emitter Saturation Voltage, High Current−Gain.

/ Applications

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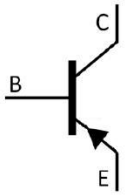
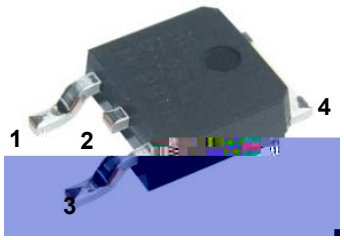
Low power audio amplifier,Low current, high speed switching applications.

/ Equivalent Circuit



/ Pinning



PIN1 χ Base PIN 2,4 χ Collector PIN 3 χ Emitter

/ h_{FE} Classifications & Marking

ծ м ヽ ب ˝ See Marking Instructions.

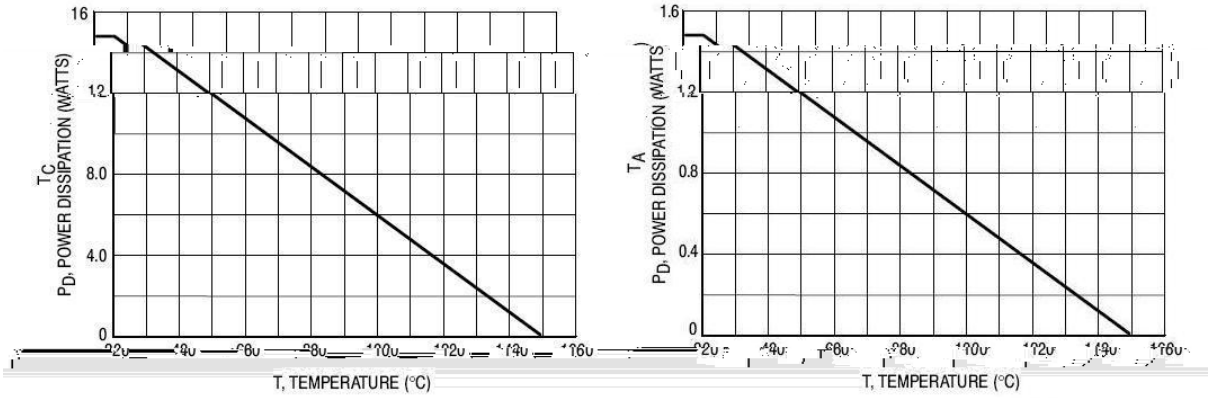
/ Absolute Maximum Ratings(Ta=25)

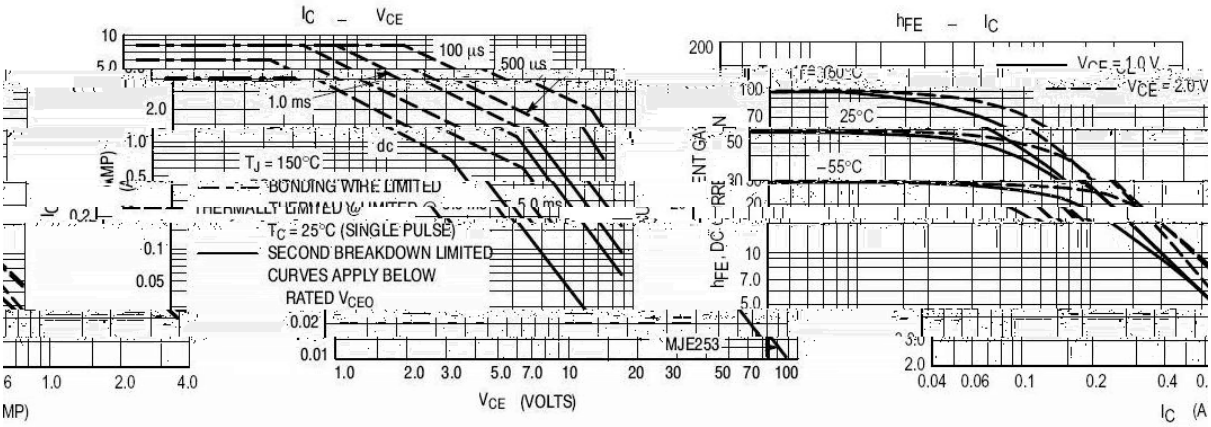
v ̈Ω Parameter	ϒ N Symbol	̈Ω Ö Rating	D Ч Unit
Collector to Base Voltage	V_{CBO}	-100	V
Collector to Emitter Voltage	V_{CEO}	-100	V
Emitter to Base Voltage	V_{EBO}	-7.0	V
Collector Current - Continuous	$I_{C(1)}$	-4.0	A
Peak Collector Current - Continuous	$I_{C(2)}$	-8.0	A
Base Current - Continuous	I_B	-10	A
Collector Power Dissipation	P_D	1.4	W
Collector Power Dissipation	P_D(Tc=25)	12.5	W
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

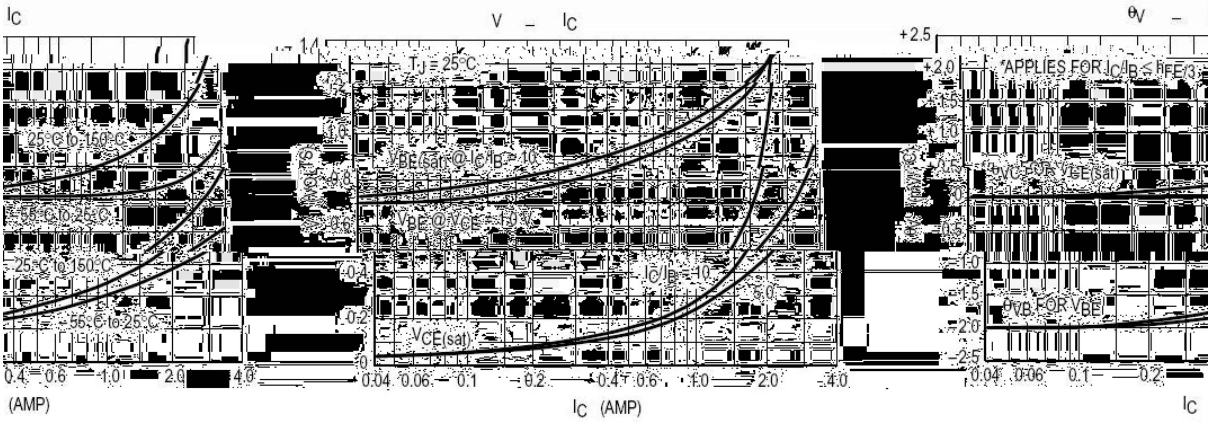
/ Electrical Characteristics(Ta=25)

v ̈Ω Parameter	ϒ N Symbol	Ш :† Ţ Test Conditions	ώ ṇ Ö Min	Ɛ ʒ Ö Typ	ώ ² Ö Max	D Ч Unit
Collector to Emitter Breakdown Voltage	V_{CEO}	I_C=-10mA I_B=0	-100			V
Collector Cut-Off Current	$I_{CBO(1)}$	V_{CB}=-100V I_E=0			-0.1	μA
	$I_{CBO(2)}$	V_{CE}=-100V Tc=125			-0.1	mA
Emitter Cut-Off Current	I_{EBO}	V_{EB}=-7.0V I_C=0			-0.1	μA
DC Current Gain	$h_{FE(1)}$	V_{CE}=-1.0V I_C=-200mA	40		180	
	$h_{FE(2)}$	V_{CE}=-1.0V I_C=-1.0A	15			
Collector to Emitter Saturation Voltage	$V_{CE(sat)\ (1)}$	I_C=-500mA I_B=-50mA			-0.3	V
	$V_{CE(sat)\ (2)}$	I_C=-1.0A I_B=-100mA			-0.6	V
Base to Emitter Saturation Voltage	$V_{BE(sat)}$	I_C=-2.0A I_B=-200mA			-1.8	V
Base to Emitter On Voltage	$V_{BE(on)}$	V_{CE}=-1.0V I_C=-500mA			-1.5	V
Current- Gain Bandwidth Product	f_T	V_{CE}=-10V I_C=-100mA	40			MHz
Output Capacitance	C_{ob}	V_{CB}=-10V f=0.1MHz			50	pF

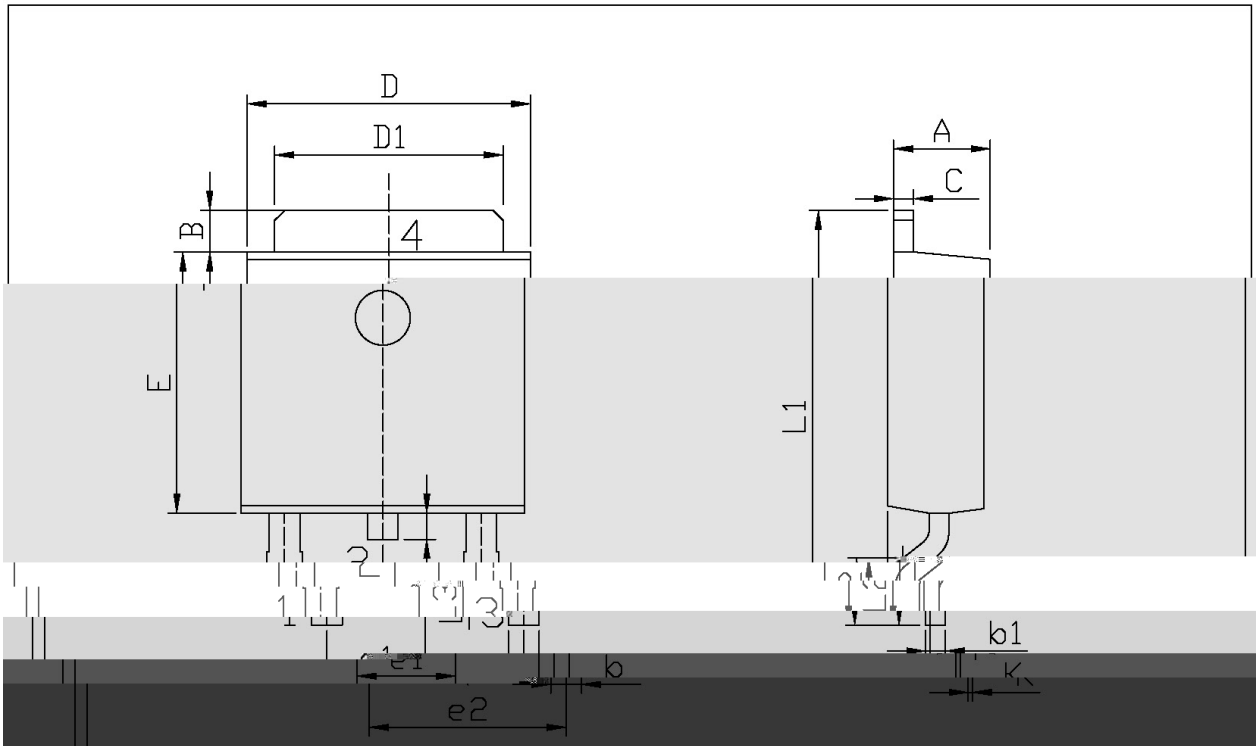
/ Electrical Characteristic Curve







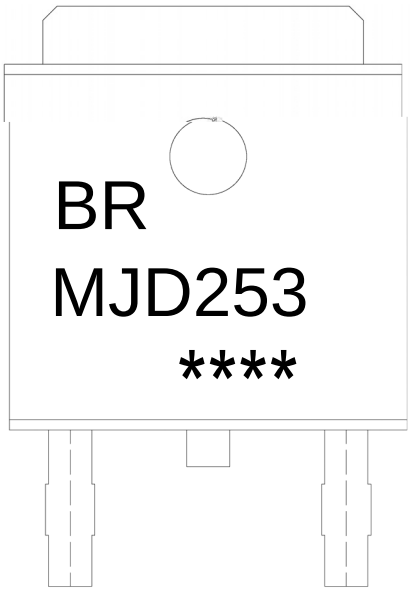
/ Package Dimensions



单位：mm

Symbol	Dimensions In Millimeters		Symbol	Dimensions In Millimeters	
	Min	Max		Min	Max
A	2.20	2.40	E	5.95	6.25
B	0.95	1.25	e1	2.24	2.34
b	0.50	0.70	e2	4.43	4.73
b1	0.45	0.55	L1	9.45	9.95

/ Marking Instructions



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BR χ	ѭ ϛ и Ґђ
PMG586 χ	ѭ ғ β ʒ ɴ
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Note:	
BR:	Company Code
MJD253:	Product Type.
****:	Lot No. Code, code change with Lot No.

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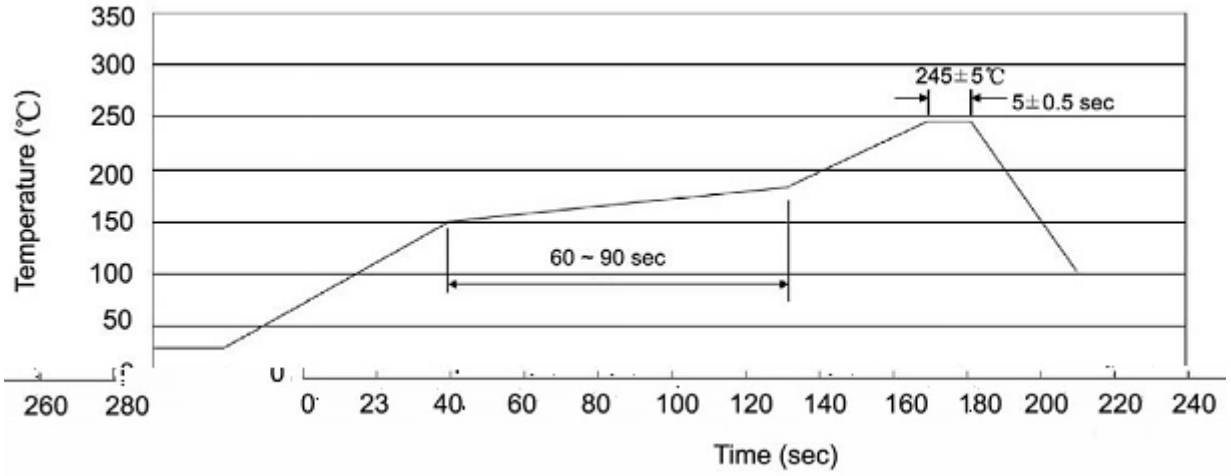

ب ˝ χ

1 Ĺ ♬ □ ỷ 25 Ḱ 150 ł ı `H ڑ 60 Ḱ 90sec;

2 Š Ë □ ỷ 245 ° 5 ł ı `H ڑ `Y ㅅ ㎛ 5 ° 0.5sec;

3 ì ˙ ㅓ ˛ ɔ ෯ ỷ ㎛ 2 Ḱ 10 ł /sec.

Note:

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

2.Peak Temp.:245 ° 5 ł , Duration:5 ° 0.5sec.

3. Cooling Speed: 2~10 ł /sec.

/ Resistance to Soldering Heat Test Conditions

□ ỷ χ 260 ° 5 ł `H ڑ χ 10 ° 1 sec. Temp.:260±5 Time:10±1 sec

/ Packaging SPEC.

ɔ ` ㅓ Ł / REEL

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm^3)		
	Units/Reel 只/卷盘	Reels/Inner Box 卷盘/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Reel	Inner Box 盒	Outer Box 箱
TO-252	2,500	2	5,000	5	25,000	13 ×16	360×360×50	385×257×392