/ Descriptions

TO-252 NPN Silicon NPN transistor in a TO-252 Plastic Package.

/ Features

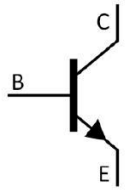
V_{CEO}

Low Collector Emitter Saturation Voltage, High Current Gain.

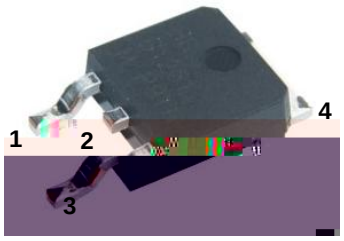
/ Applications

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

/ Equivalent Circuit



/ Pinning



PIN1 Base PIN 2,4 Collector PIN 3 Emitter

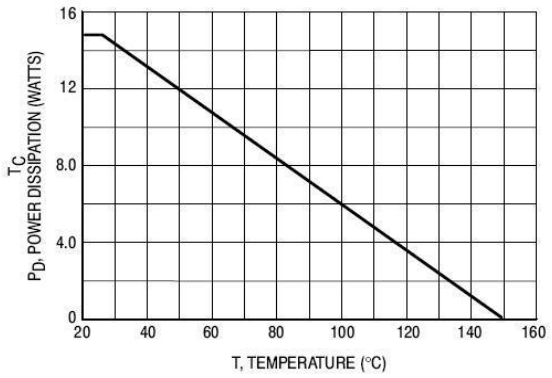
/ h_{FE} Classifications & Marking

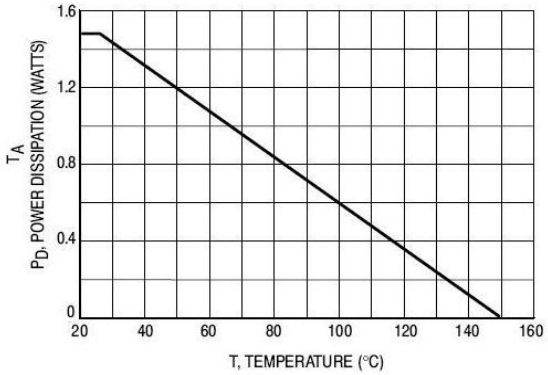
See Marking Instructions.

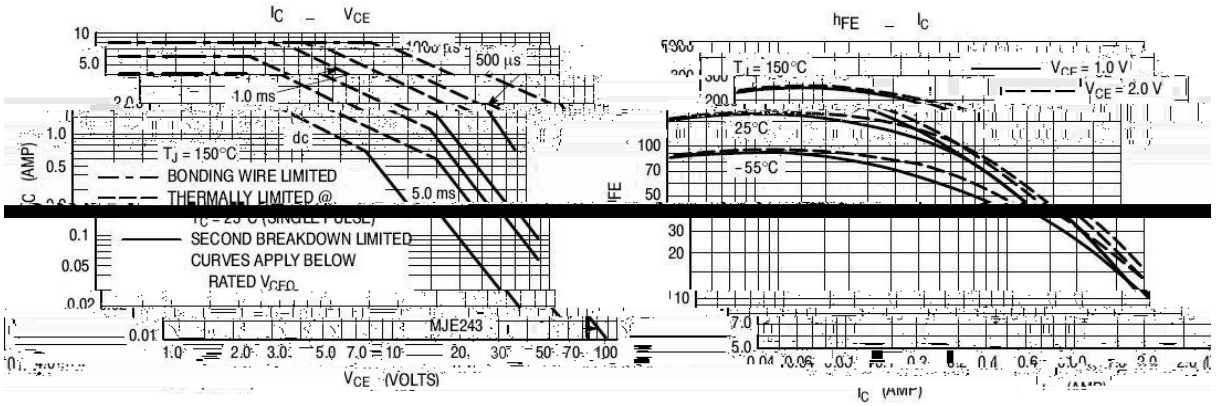
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	100	V
Collector to Emitter Voltage	V_{CEO}	100	V
Emitter to Base Voltage	V_{EBO}	7.0	V
Collector Current - Continuous	$I_{C(1)}$	4.0	A
Peak Collector Current - Continuous	$I_{C(2)}$	8.0	A
Base Current - Continuous	I_B	10	A
Collector Power 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	

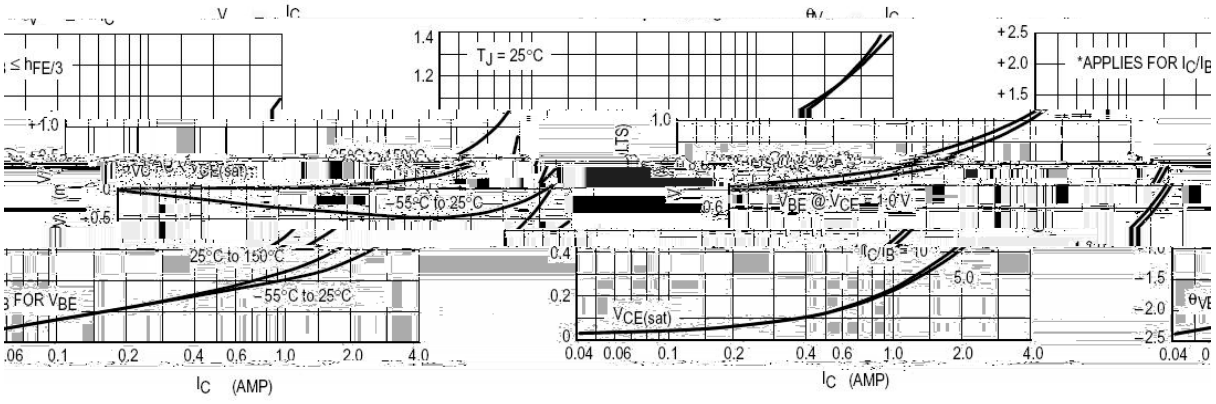
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Emitter Breakdown Voltage	V_{CEO}	I_C=10mA I_B=0	100			V
Collector Cut-Off Current	$I_{CBO(1)}$	V_{CB}=100V I_E=0			0.1	A
	$I_{CBO(2)}$	V_{CE}=100V Tc=125			0.1	mA
Emitter Cut-Off Current	I_{EBO}	V_{EB}=-7.0V I_C=0			0.1	A
DC Current Gain	$h_{FE(1)}$	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=44 Tm-0.00

/ Electrical Characteristic Curve

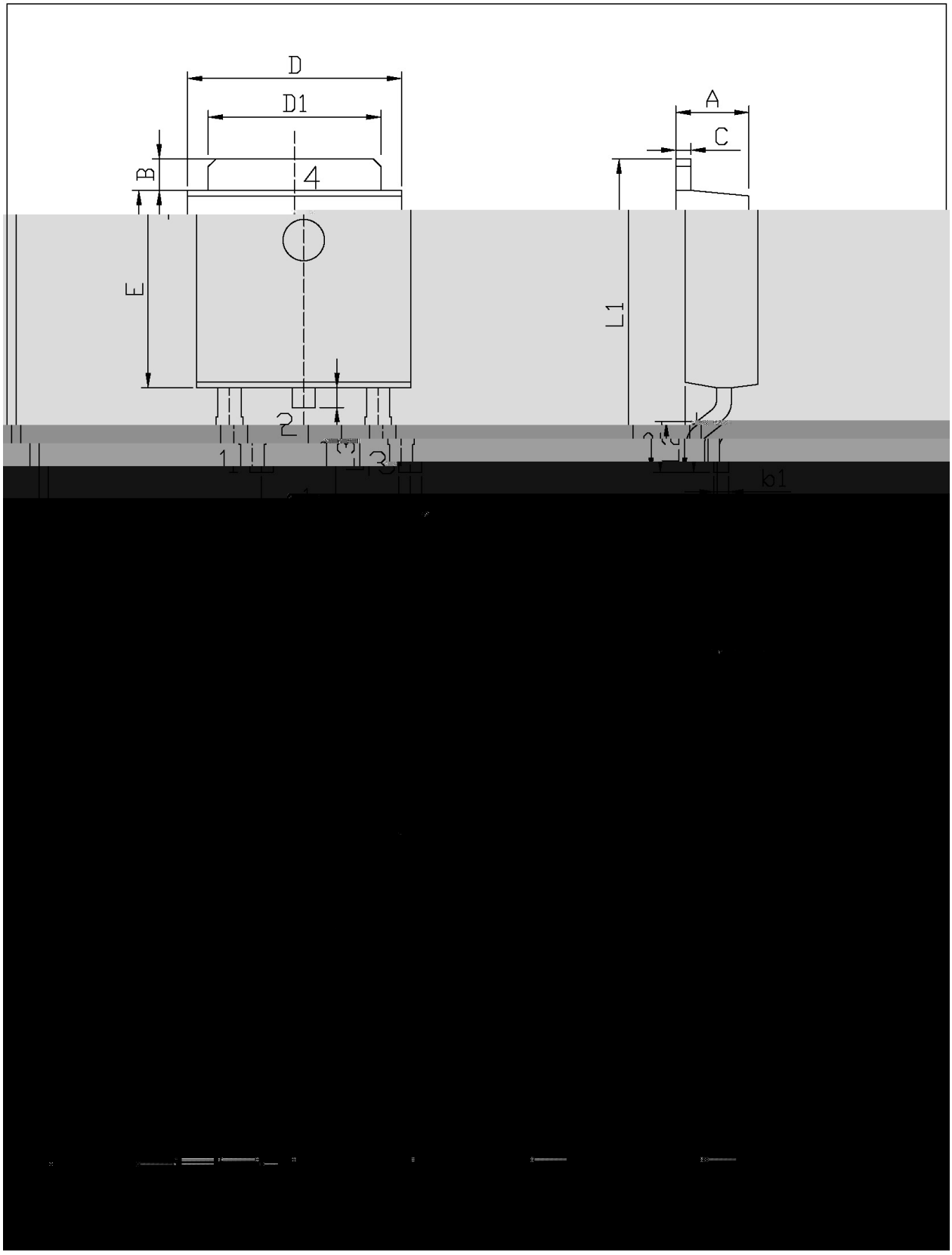




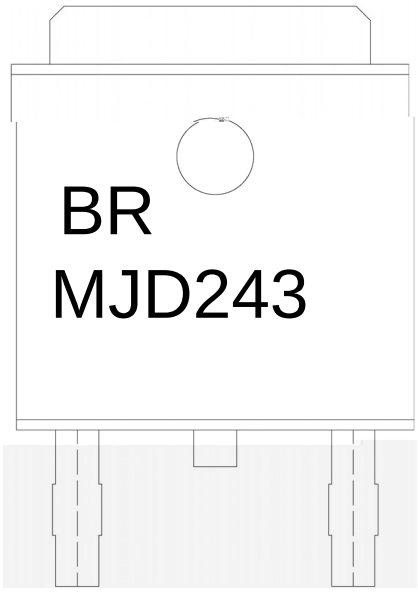




/ Package Dimensions



/ Marking Instructions



BR

MJD243

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Note:

BR:	Company Code
MJD243:	Product Type.
****:	Lot No. Code, code change with Lot No.

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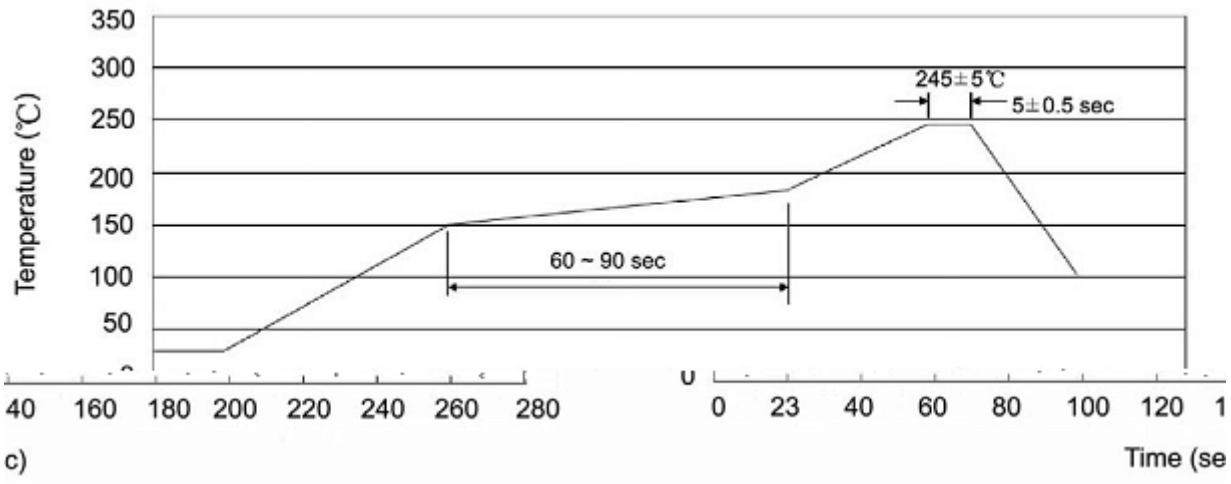

Note:

1	25	150	60	90sec;	1.Preheating:25~150 , Time:60~90sec.
2	245±5			5±0.5sec;	2.Peak Temp.:245±5 , Duration:5±0.5sec.
3		2	10	/sec.	3. Cooling Speed: 2~10 /sec.

/ Resistance to Soldering Heat Test Conditions

260±5	10±1 sec.	Temp.:260±5	Time:10±1 sec

/ Packaging SPEC.

/ REEL

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm^3)		
	只 卷盘	卷盘 盒	只 盒	盒 箱	只 箱		盒	箱