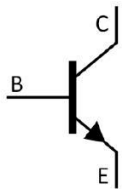


Rev.E May.-2016

KF \$ , ) E GE Silicon NPN transistor in a TO-252 Plastic Package.

$V_{CE0}$   
Low Collector Emitter Saturation Voltage, High Current Gain.

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

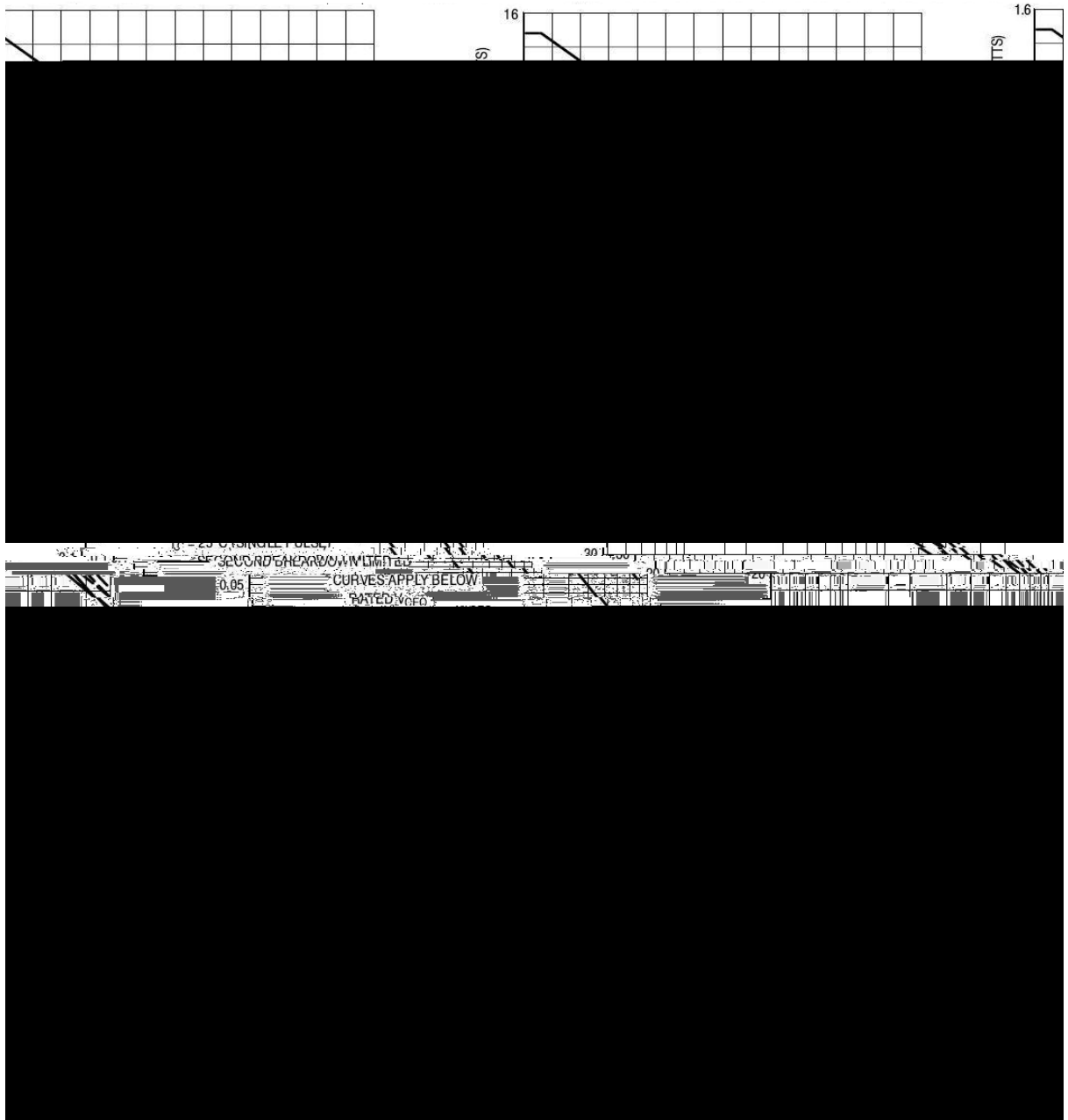


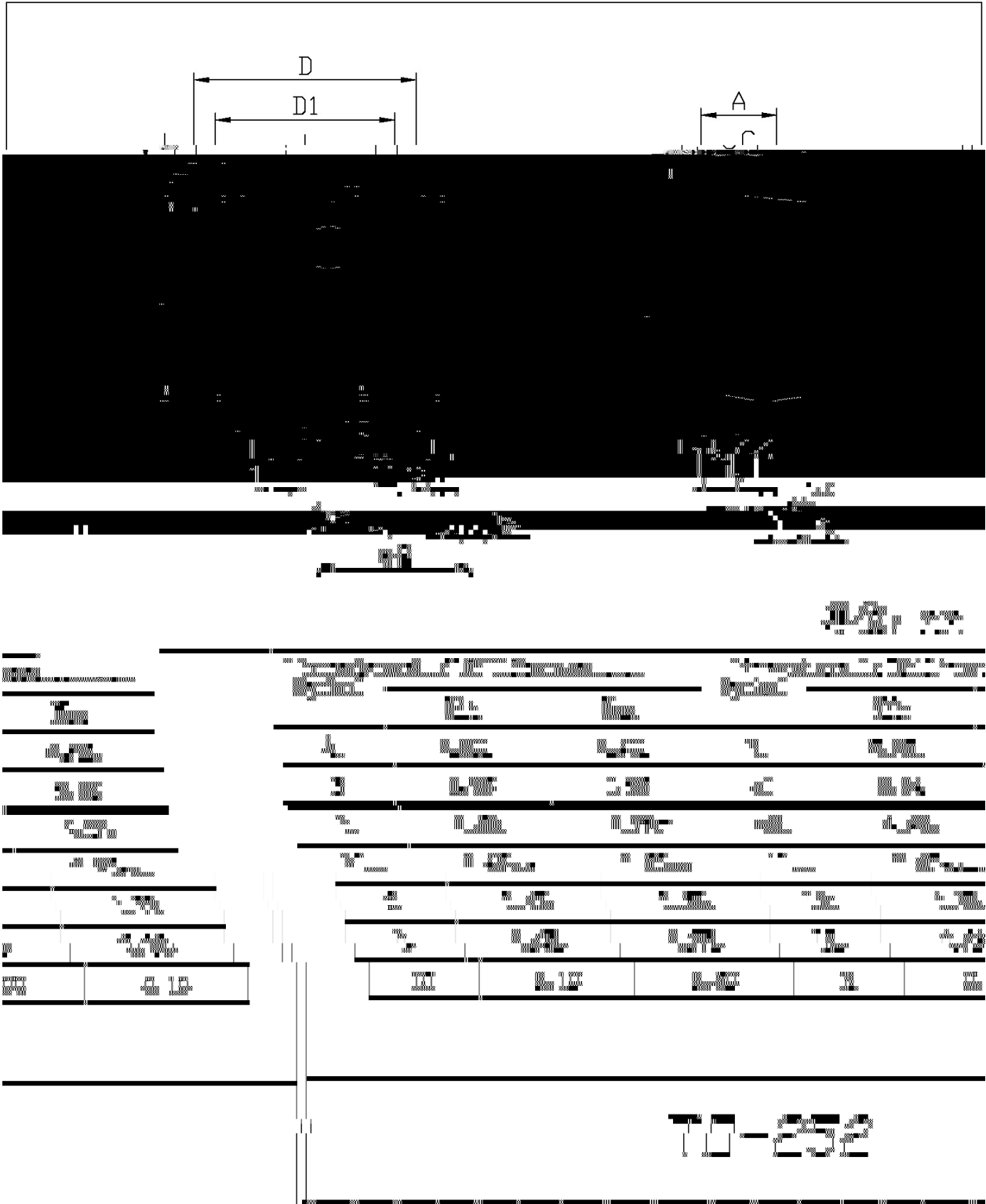
PIN1 Base      PIN 2,4 Collector      PIN 3 Emitter

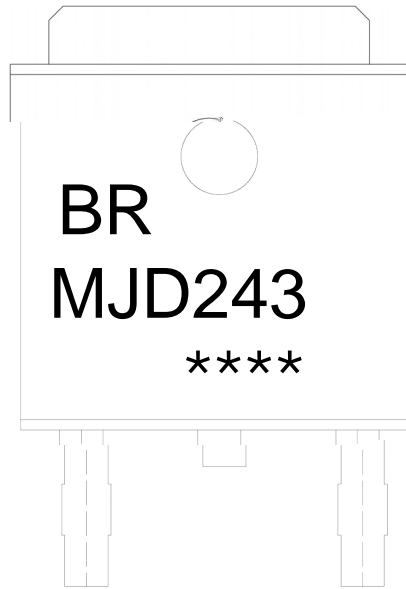
See Marking Instructions.

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	$P_D(T_C=25^\circ\text{C})$	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	$V_{CEO}$	$I_C=10\text{mA}$ $I_B=0$	100			V
Collector Cut-Off Current	$I_{CBO(1)}$	$V_{CB}=100\text{V}$ $I_E=0$			0.1	A
	$I_{CBO(2)}$	$V_{CE}=100\text{V}$ $T_C=125$			0.1	mA
Emitter Cut-Off Current	$I_{EBO}$	$V_{EB}=-7.0\text{V}$ $I_C=0$			0.1	A
DC Current Gain	$h_{FE(1)}$	$V_{CE}=1.0\text{V}$ $I_C=200\text{mA}$	40		180	
	$h_{FE(2)}$	$V_{CE}=1.0\text{V}$ $I_C=1.0\text{A}$	15			
Collector to Emitter Saturation Voltage	$V_{CE(sat)} (1)$	$I_C=500\text{mA}$ $I_B=50\text{mA}$			0.3	V







BR

DA )+\*

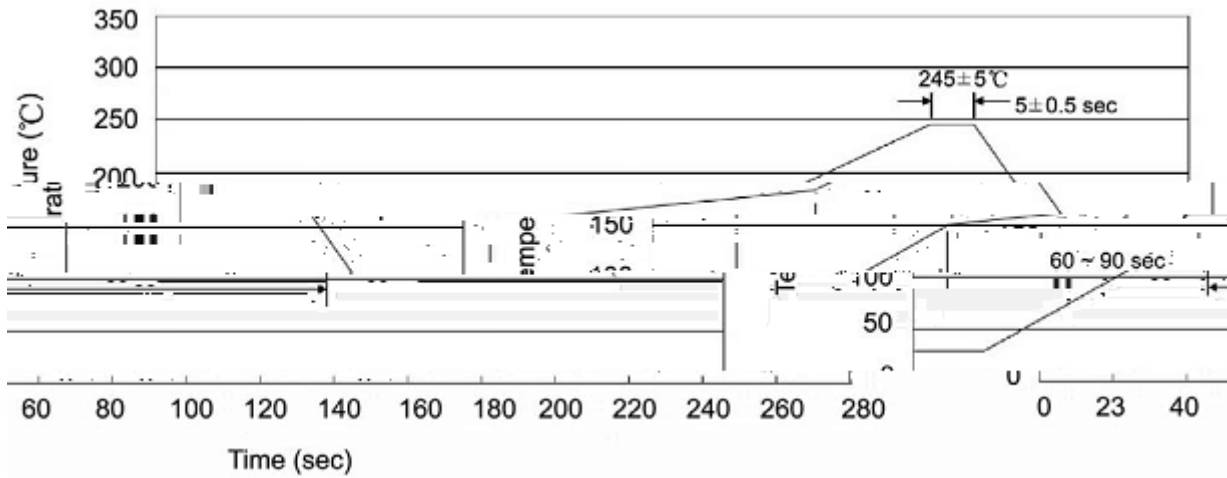
!!!!

Note:

BR: Company Code

MJD243: Product Type.

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

**Temperature Profile for IR Reflow Soldering(Pb-Free)**

**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.              |

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

/ REEL

Package Type	Units					Dimension (unit mm <sup>3</sup> )		
	Units/Reel	Reels/Inner Box	Units/Inner Box	Inner Boxes/Outer Box	Units/Outer Box	Reel	Inner Box	Outer Box
TO-252	2,500	2	5,000	5	25,000	13 ×16	360×360×50	385×257×392