

**/ Descriptions**

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

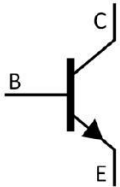
**/ Features**

MBIT  
High breakdown voltage, adoption of MBIT process excellent  $h_{FE}$  linearity.

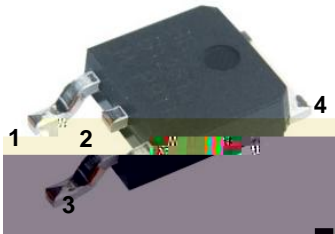
**/ Applications**

High voltage driver applications.

**/ Equivalent Circuit**



**/ Pinning**



PIN1 Base          PIN 2,4 Collector          PIN 3 Emitter

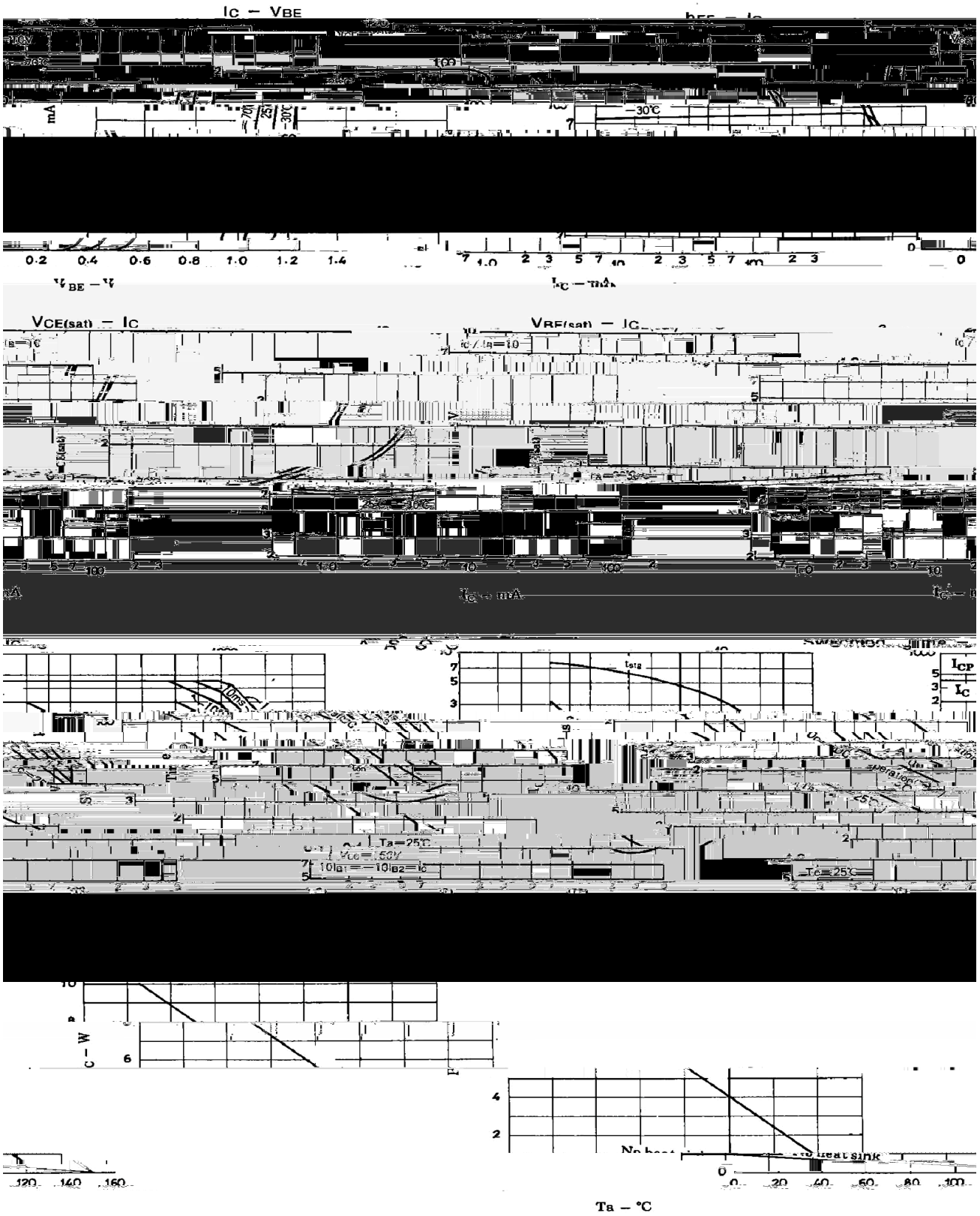
**/  $h_{FE}$  Classifications & Marking**

$h_{FE}$ Classifications Symbol	D	E
$h_{FE}$ Range	60 120	100 200

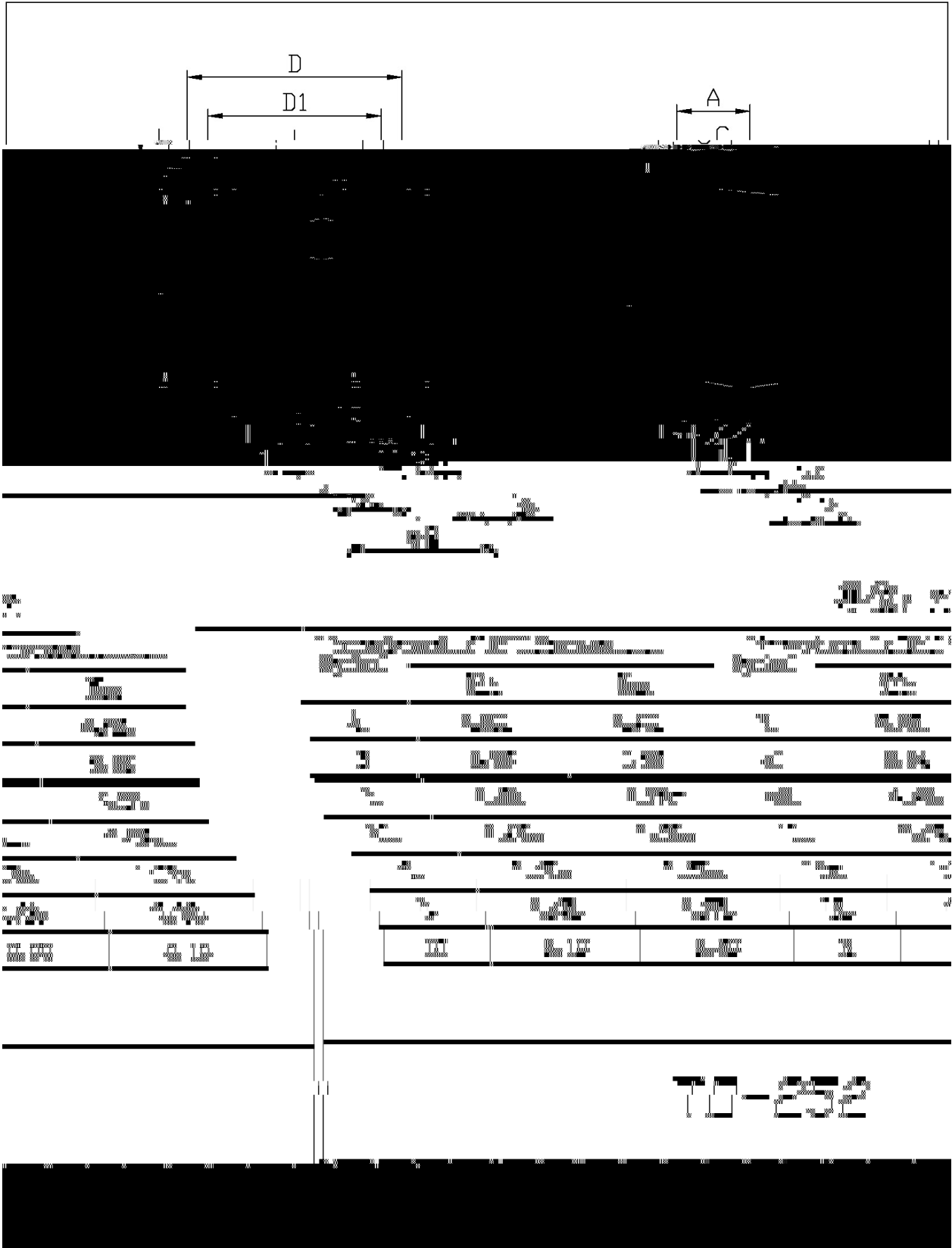
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	$V_{CBO}$	400	V
Collector to Emitter Voltage	$V_{CEO}$	400	V
Emitter to Base Voltage	$V_{EBO}$	5.0	V
Collector Current - Continuous	$I_C$	200	mA
Collector Current – Continuous(Pulse)	$I_{CP}$	400	mA
Collector Power Dissipation	$P_C$	1.0	W
Collector Power Dissipation	$P_C(T_c=25^\circ\text{C})$	10	W
Junction Temperature	$T_j$	150	
Storage Temperature Range	$T_{stg}$	-55 150	

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage	$V_{EB0}$	$I_C=10\mu A$ $I_E=0$	400			V
Collector to Emitter Breakdown Voltage	$V_{CE0}$	$I_C=1.0mA$ $R_{BE}=\infty$				

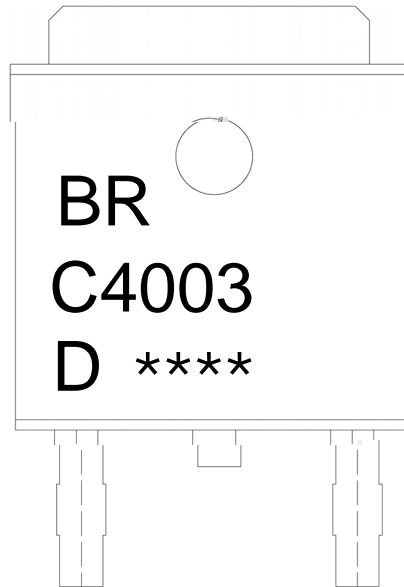
/ Electrical Characteristic Curve



/ Package Dimensions



/ Marking Instructions



BR

C4003

D:  $h_{FE}$

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Note:

BR: Company Code

C4003: Product Type.

D:  $h_{FE}$  Classifications Symbol

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

