

/ Descriptions

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

/ Features

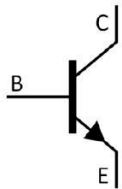
MBIT

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

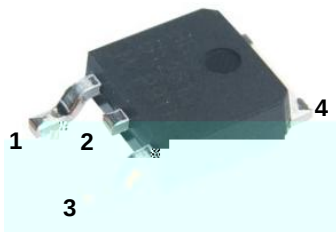
/ Applications

High voltage driver applications.

/ Equivalent Circuit



/ Pinning



PIN1 Base PIN 2,4 Collector PIN 3 Emitter

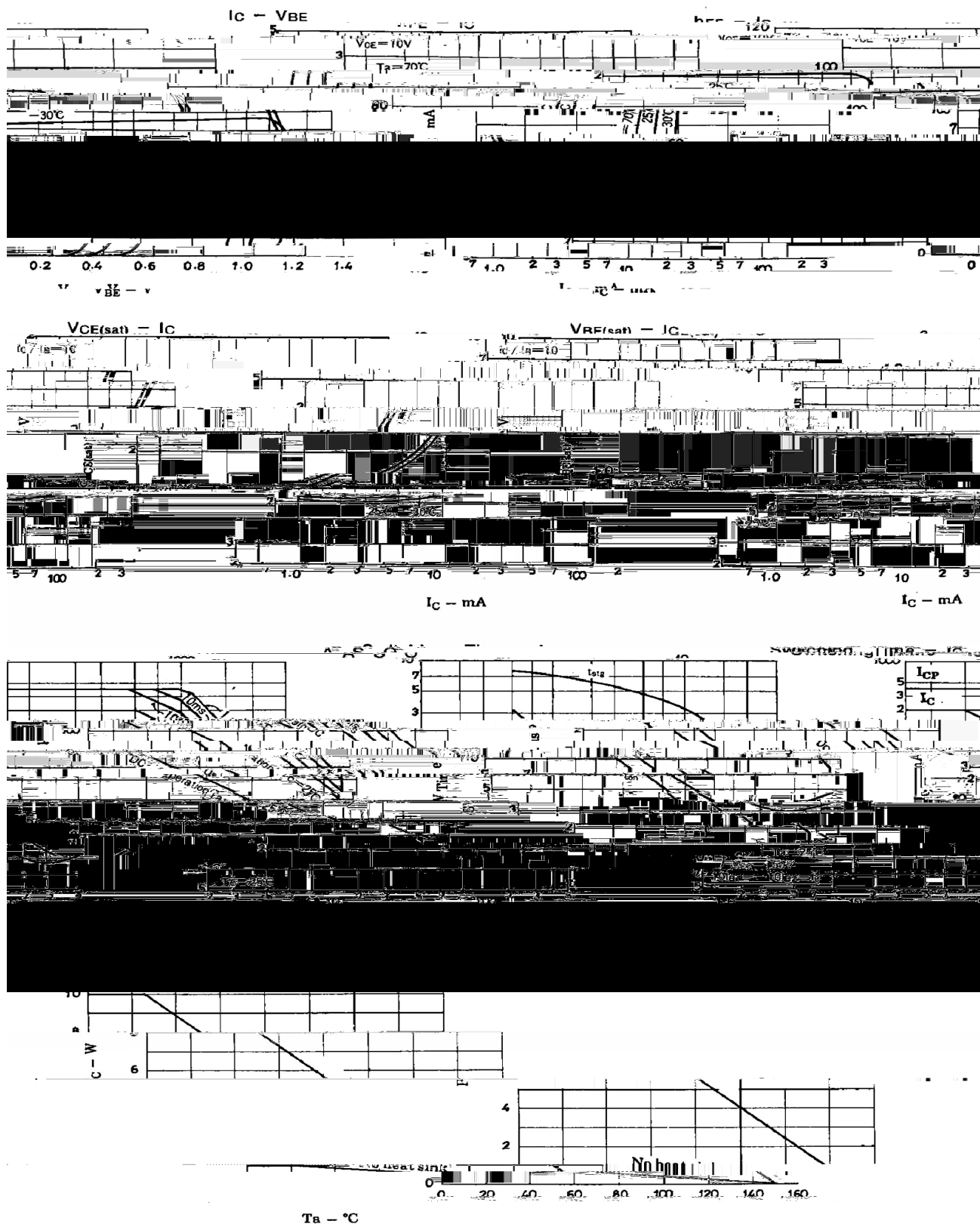
/ h_{FE} Classifications & Marking

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

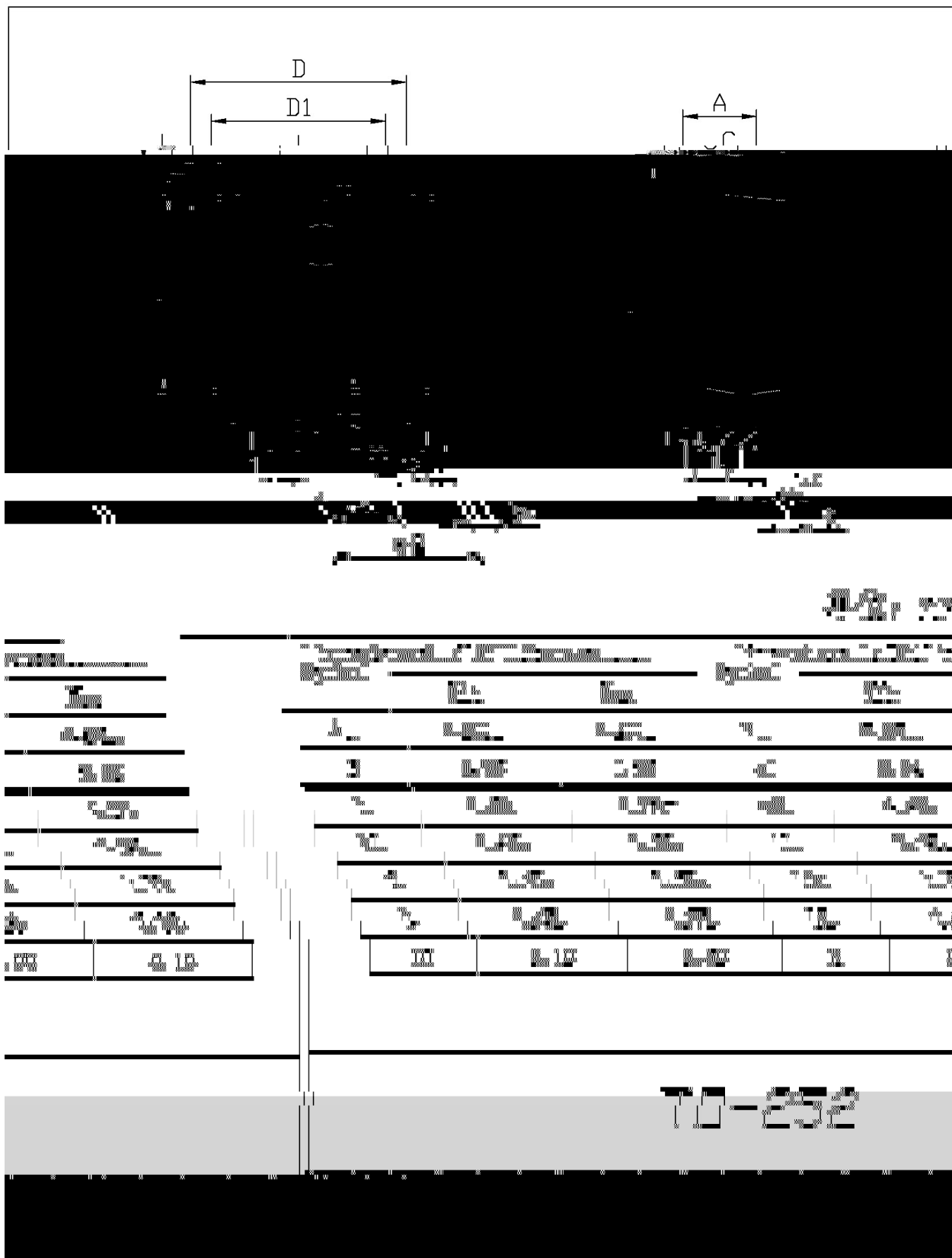
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	400	V
Collector to Emitter Voltage	V_{CEO}	400	V
Emitter to Base Voltage	V_{EBO}	5.0	V
Collector Current - Continuous	I_C	200	mA
Collector Current – Continuous(Pulse)	I_{CP}	400	mA
Collector Power Dissipation	P_C	1.0	W
Collector Power Dissipation	$P_C(T_c=25^\circ\text{C})$	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_{CB0}	$I_C=10\mu A$ $I_E=0$	400			V
Collector to Emitter Breakdown Voltage	V_{CE0}	$I_C=1.0mA$ $R_{BE}=\infty$				

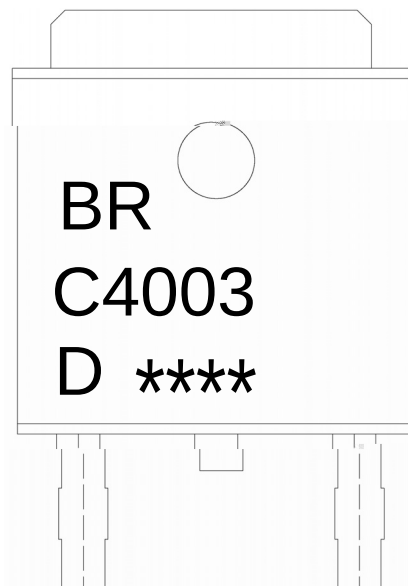
/ Electrical Characteristic Curve



/ Package Dimensions



/ Marking Instructions



BR

C4003

D: h_{FE}

Note:

BR: Company Code

C4003: Product Type.

D: h_{FE} Classifications Symbol

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

