/ Descriptions

TO-3P NPN Silicon NPN transistor in a TO-3P Plastic Package.

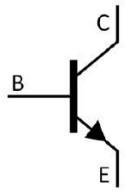
/ Features

High speed switching, wide SOA.

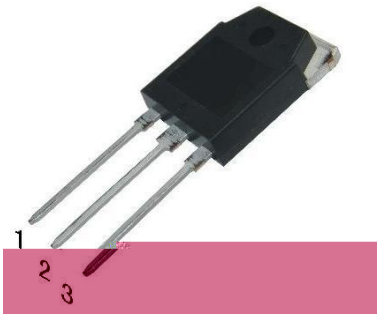
/ Applications

For high voltage, large power supply circuit.

/ Equivalent Circuit



/ Pinning



PIN1 Base PIN 2 Collector PIN 3 Emitter

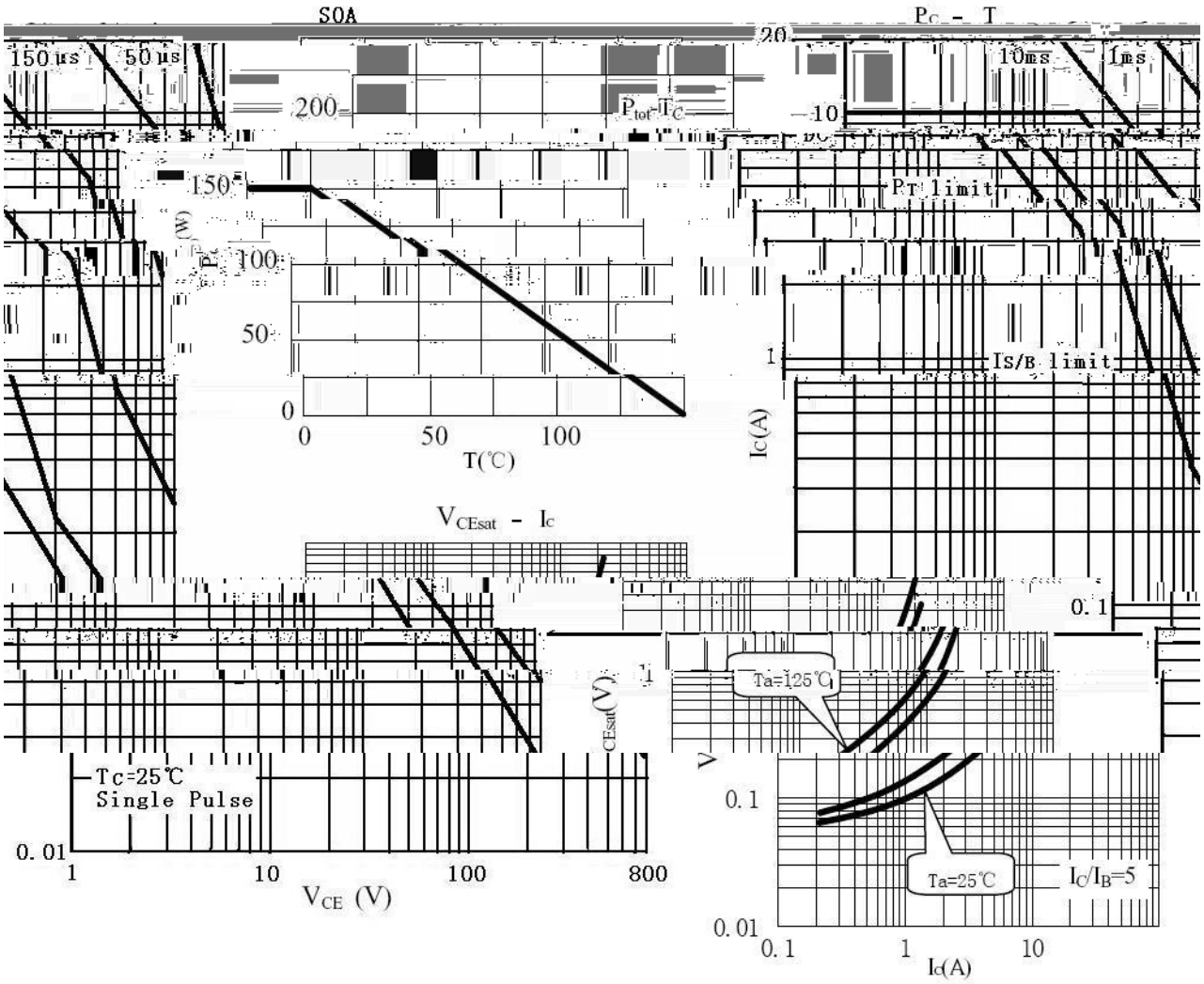
/ h_{FE} Classifications & Marking

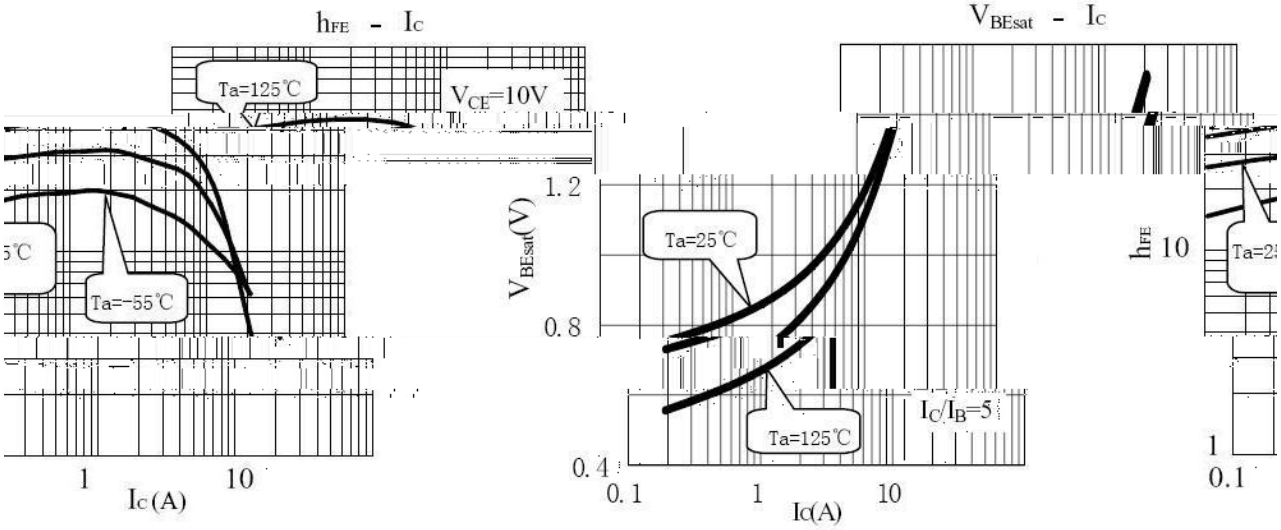
See Marking Instructions.

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	1200	V
Collector to Emitter Voltage	V_{CEO}	800	V
Emitter to Base Voltage	V_{EBO}	7	V
Collector Current - Continuous	I_C	10	A
Peak Collector Current	I_{CP}	20	A
Base Current	I_B	4	A
Base Current Peak	I_{BP}	8	A
Collector Power Dissipation	$P_{C(TC=25\ )}$	150	W
Junction Temperature	T_j	150	℃
Storage Temperature Range	T_{stg}	-55 150	℃
Thermal Resistance, Junction to Case	$R_{th(j-c)}$	0.83	℃/W

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage	V_{CBO}	I_C=0.1mA I_E=0	1200			V
Collector to Emitter Breakdown Voltage	V_{CEO}	I_C=0.2A I_B=0	800			V
Emitter to Base Breakdown Voltage	V_{EBO}	I_E=0.1mA I_C=0	7			V
Collector Cut-Off Current	I_{CBO}	V_{CB}=1200V I_E=0			100	μA
Collector Cut-Off Current	I_{CEO}	V_{CE}=800V I_B=0			100	μA
Emitter Cut-Off Current	I_{EBO}	V_{EB}=7V I_C=0			100	μA
DC Current Gain	$h_{FE(1)}$	V_{CE}=5V I_C=5A	8		60	
	$h_{FE(2)}$	V_{CE}=5V I_C=1mA	5			
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=5A I_B=1A			1	V
Base to Emitter Saturation Voltage	$V_{BE(sat)}$	I_C=5A I_B=1A			1.5	V
Transition Frequency	f_T	V_{CE}=10V I_C=1A		8		MHz
Storage Time	t_S	UI9600 I_C=0.5A	1		9	μs

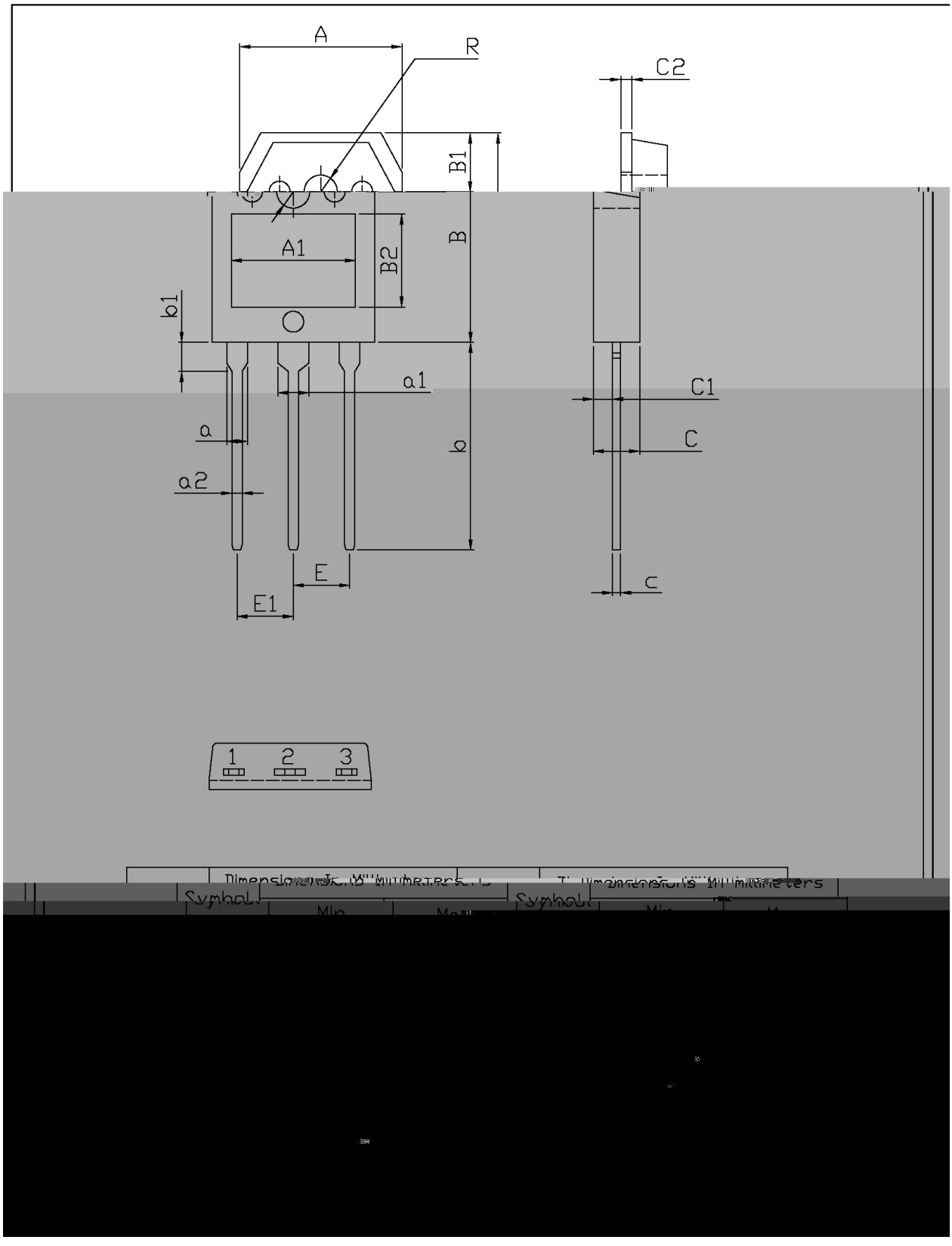
/ Electrical Characteristic Curve



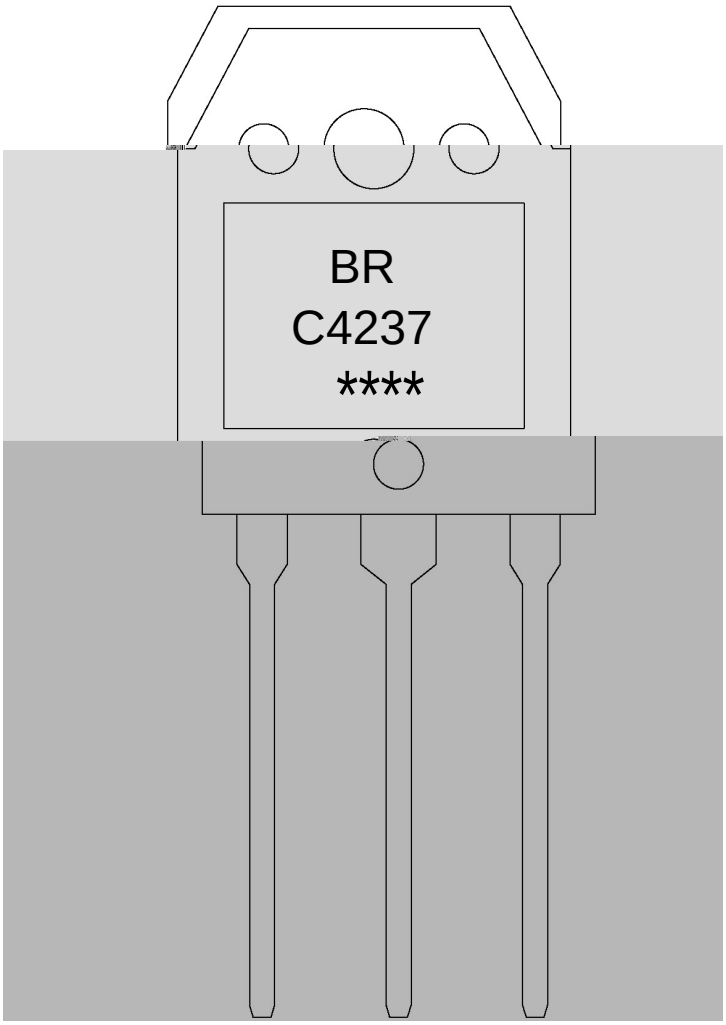


/ Package Dimensions

TO-3P 单位：mm



/ Marking Instructions



BR:

C4237

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Note:

BR:	Company Code.
C4237:	Product Type.
****:	Lot No. Code, code change with Lot No.