

/ Descriptions

Silicon NPN transistor in a TO-92 Plastic Package.

/ Features

Complementary to KTA1271.

/ Applications

High current application.

/ Equivalent Circuit



/ Pinning



PIN1 Base PIN 2 Collector PIN 3 Emitter

/ hFE Classifications & Marking

h _{FE} Classifications Symbol	O	Y
h _{FE} Range	100~200	160~320

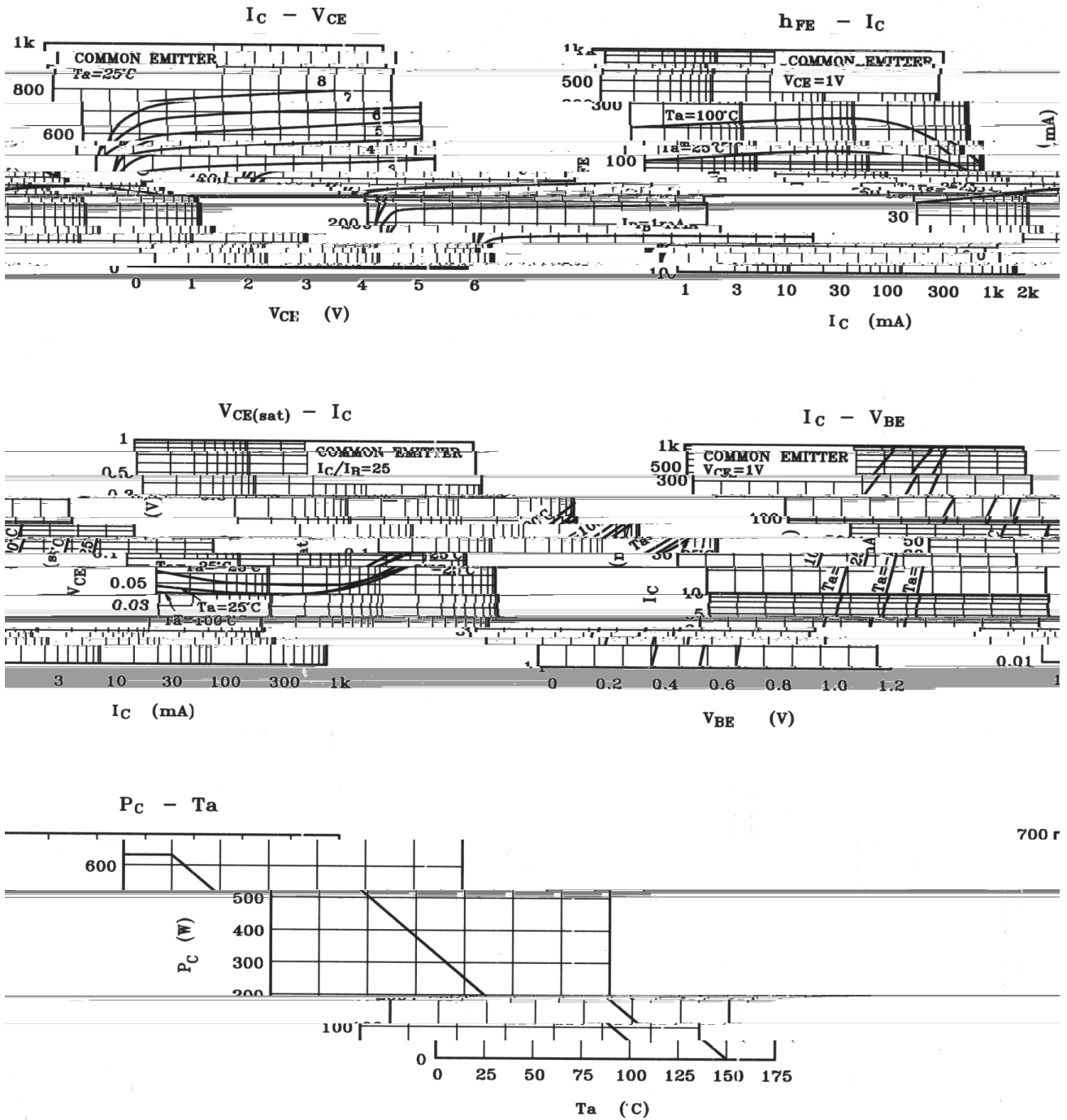
/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	35	V
Collector to Emitter Voltage	V_{CEO}	30	V
Emitter to Base Voltage	V_{EBO}	5.0	V
Collector Current - Continuous	I_C	800	mA
Emitter Current - Continuous	I_E	-800	mA
Collector Power Dissipation	P_C	625	mW
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Emitter Breakdown Voltage	V_{CEO}	$I_C=10mA$ $I_B=0$	30			V
Collector Cut-Off Current	I_{CBO}	$V_{CB}=35V$ $I_E=0$			0.1	A
Emitter Cut-Off Current	I_{EBO}	$V_{EB}=5.0V$ $I_C=0$			0.1	A
DC Current Gain	$h_{FE(1)}$	$V_{CE}=1.0V$ $I_C=100mA$	100		320	
	$h_{FE(2)}$	$V_{CE}=1.0V$ $I_C=700mA$	35			
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=500mA$ $I_B=20mA$			0.5	V
Base to Emitter Voltage	V_{BE}	$V_{CE}=1.0V$ $I_C=10mA$	0.5		0.8	V
Transition Frequency	f_T	$V_{CE}=5.0V$ $I_C=10mA$		120		MHz
Collector Capacitance	C_{ob}	$V_{CB}=10V$ $I_E=0$ $f=1.0MHz$		13		pF

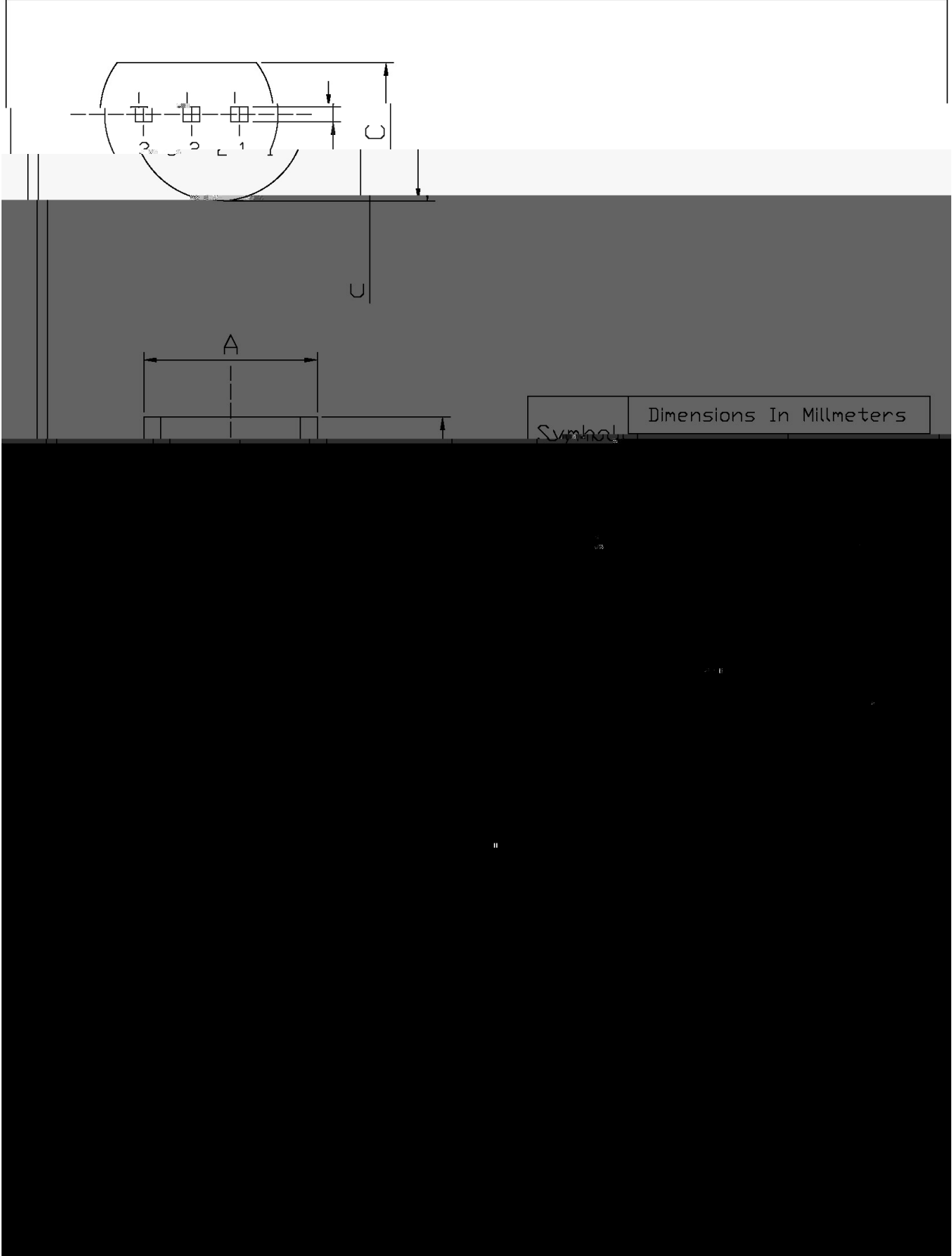
/ Electrical Characteristic Curve



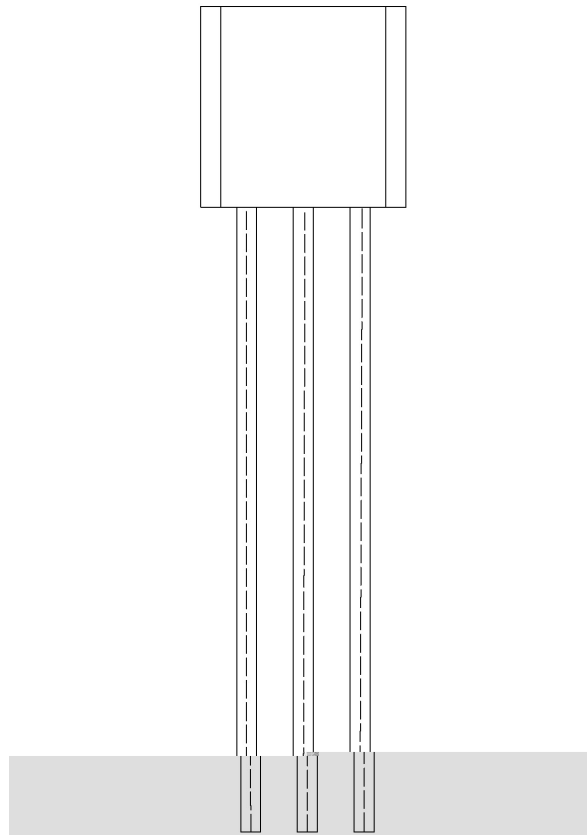
/ Package Dimensions

TO-92

Unit: mm



/ Marking Instructions



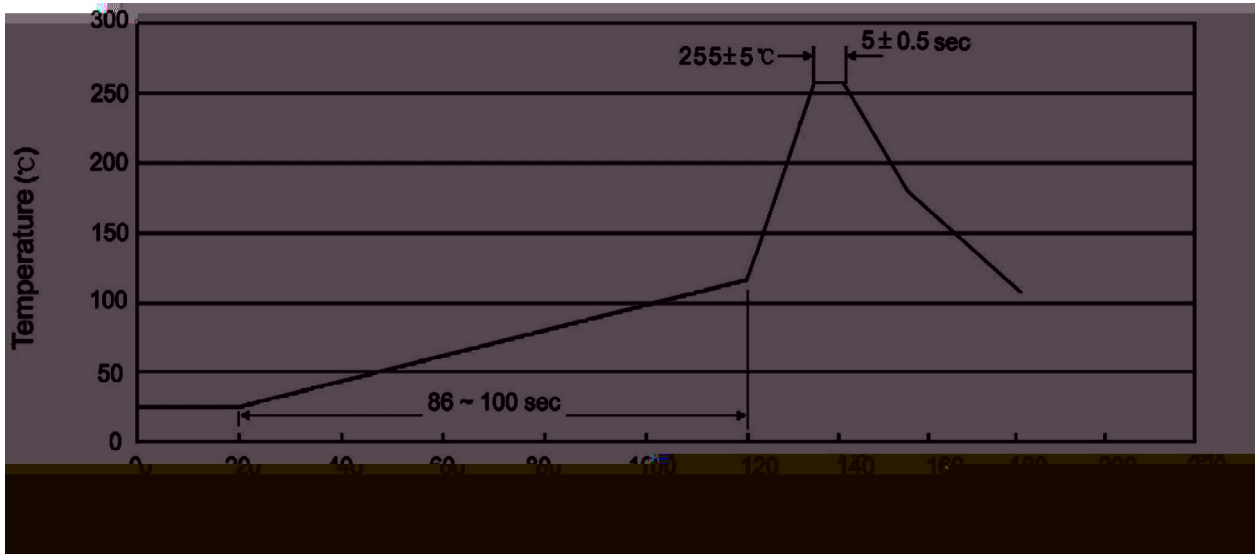
h_{FE}

Note:

BR: Company Code.

KTC3203: Product Type

() / Temperature Profile for Dip Soldering(Pb-Free)



Note:

- | | | | | | |
|---|-----|-----|----|----------|---|
| 1 | 25 | 150 | 60 | 90sec; | 1.Preheating:25~150 , Time:60~90sec. |
| 2 | 255 | 5 | 5 | 0.5sec; | 2.Peak Temp.:255 5 , Duration:5 0.5sec. |
| 3 | | | 2 | 10 /sec. | 3. Cooling Speed: 2~10 /sec. |

/ Resistance to Soldering Heat Test Conditions

270 ± 5 10 ± 1 sec. Temp:270±5 Time:10±1 sec

/ Packaging SPEC.

/ BULK

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