

/ Descriptions

KF \$) CD E GE Silicon NPN transistor in a TO-92LM Plastic Package.

/ Features

High breakdown voltage, low output capacitance, high transition frequency.

/ Applications

B/W TV video output, high voltage switching application.

/ Equivalent Circuit



/ Pinning



PIN1 Base PIN 2 Collector PIN 3 Emitter

/ h_{FE} Classifications & Marking

h_{FE} Classifications Symbol	O	Y
h_{FE} Range	70~140	120~240

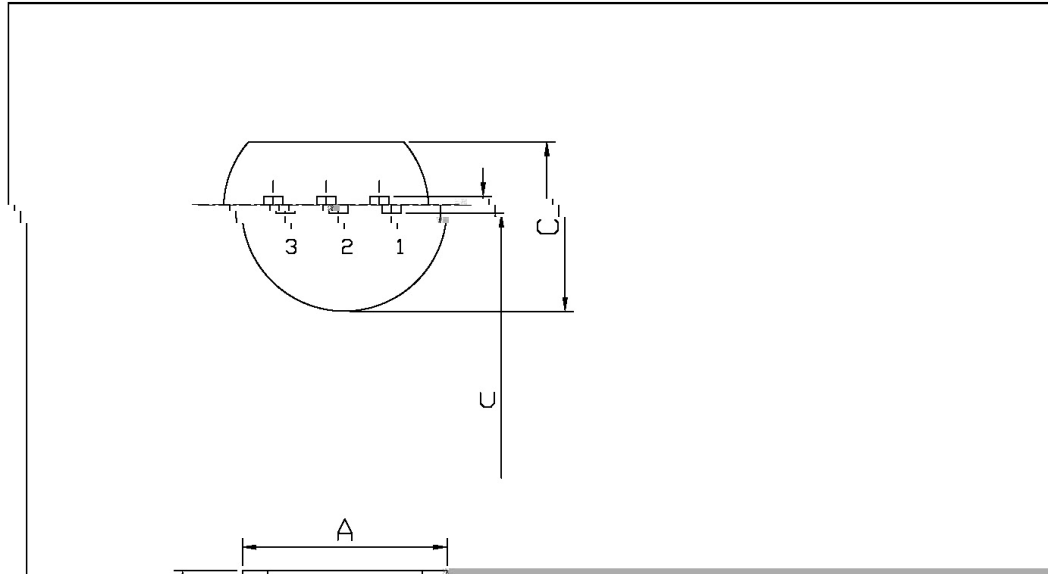
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	200	V
Collector to Emitter Voltage	V_{CEO}	150	V
Emitter to Base Voltage	V_{EBO}	5.0	V
Collector Current - Continuous	I_C	50	mA
Emitter Current - Continuous	I_E	-50	mA
Collector Power Dissipation	P_C	1.0	W
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector Cut-Off Current	I_{CBO}	$V_{CB}=200V$ $I_E=0$			0.1	A
Emitter Cut-Off Current	I_{EBO}	$V_{EB}=5.0V$ $I_C=0$			0.1	A
DC Current Gain	h_{FE}	$V_{CE}=5.0V$ $I_C=10mA$	70		240	
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=10mA$ $I_B=1.0mA$			0.5	V
Base to Emitter Voltage	$V_{BE(sat)}$	$I_C=10mA$ $I_B=1.0mA$			1.0	V
Transition Frequency	f_T	$V_{CE}=30V$ $I_C=10mA$		120		MHz
Collector output capacitance	C_{ob}	V				

/ Package Dimensions

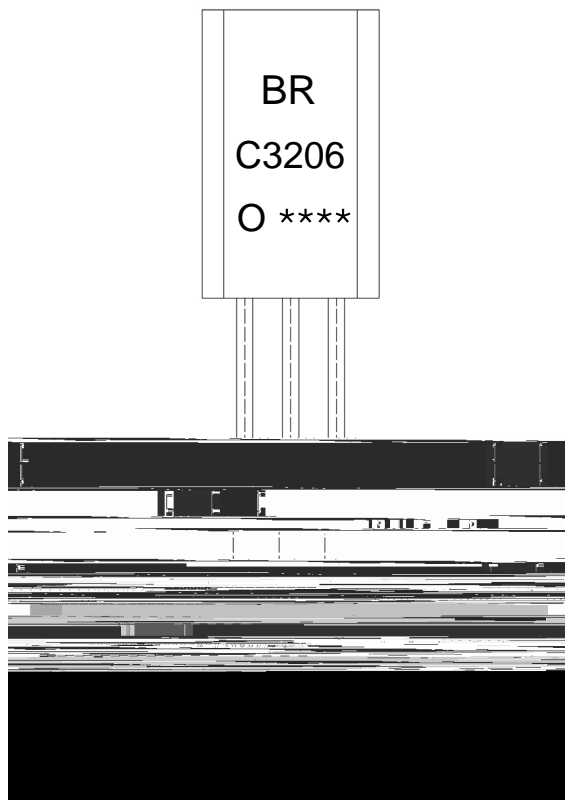
TO-92LM

Unit: mm



Symbol	Dimensions In Millimeters	
	Min	Max
A	1.47	2.0
C	0.8	1.0

/ Marking Instructions



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Note:

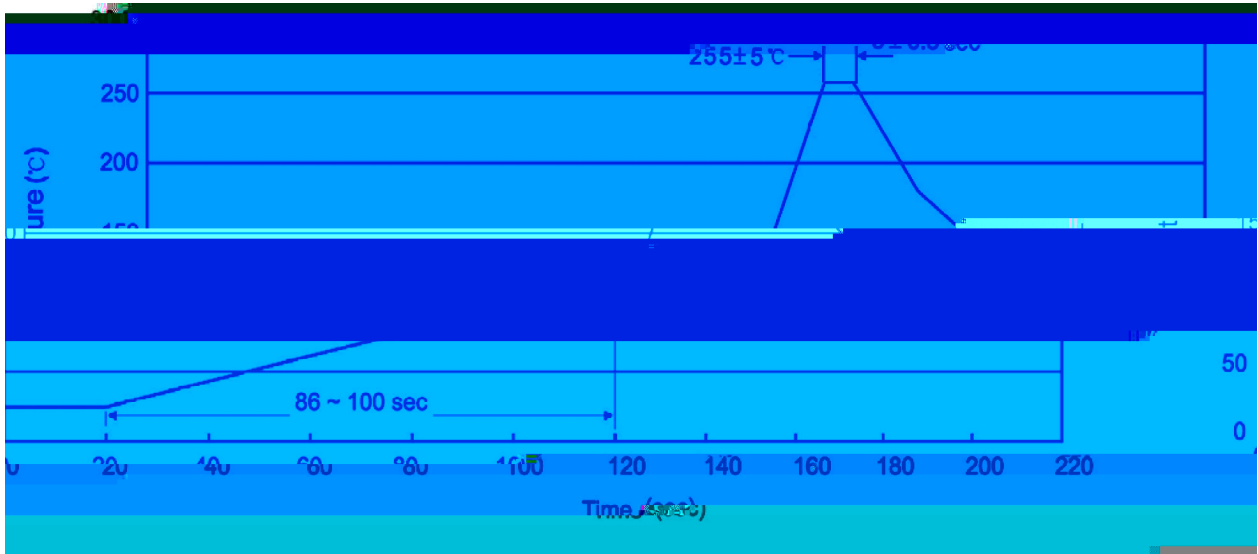
BR: Company Code.

C3206: Product Type.

O: h_{FE} Classifications Symbol

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

() / 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

Package Type	Units	Dimension	(unit mm3) 10
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