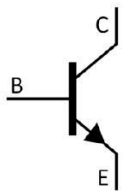


Rev.F Apr.-2019

SOT-89 NPN Silicon NPN transistor in a SOT-89 Plastic Package.

High voltage.

High voltage control circuit.



PIN1 Base PIN 2 Collector PIN 3 Emitter

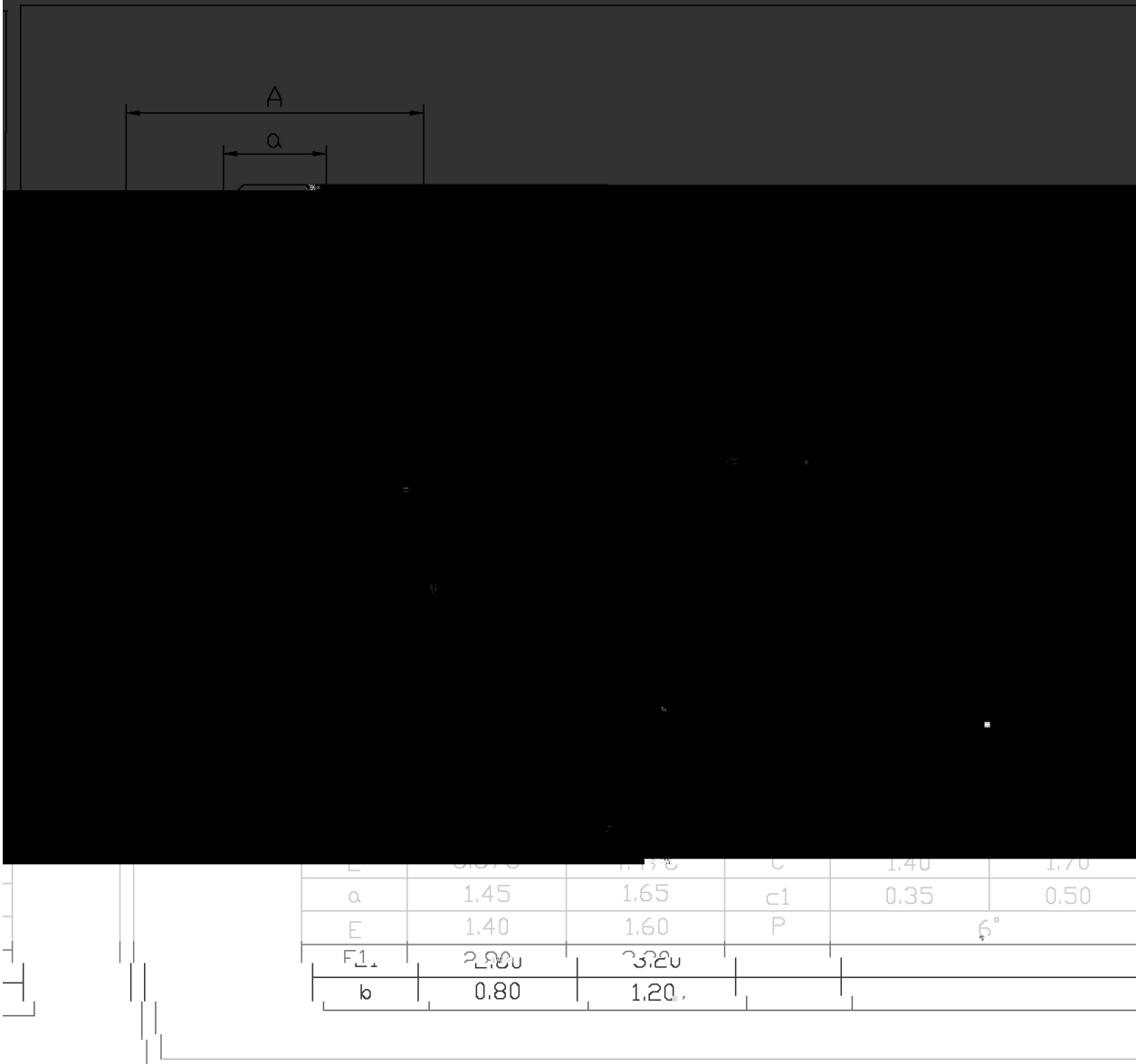
Marking	H3D *
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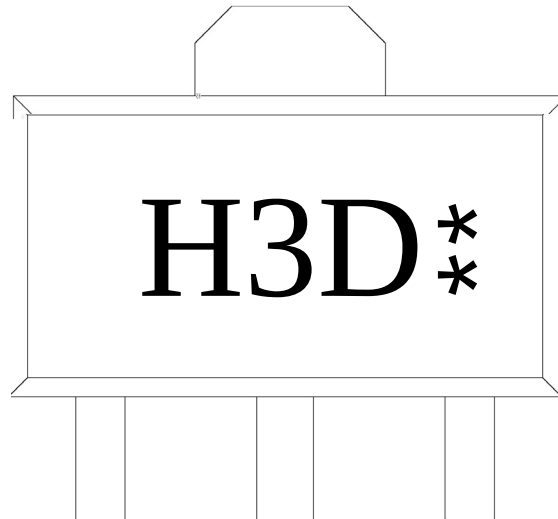
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	500	V
Collector to Emitter Voltage	V_{CEO}	400	V
Emitter to Base Voltage	V_{EBO}	6.0	V
Collector Current - Continuous	I_C	300	mA
Collector Power Dissipation	P_C	350	mW
Collector Power Dissipation	$P_{C(TC=25^\circ)}$	1.5	W
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55° 150	

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage	V_{CBO}	$I_C=100\text{ A}$ $I_E=0$	500			V
Collector to Emitter Breakdown Voltage	V_{CEO}	$I_C=1.0\text{mA}$ $I_B=0$	400			V
Emitter to Base Breakdown Voltage	V_{EBO}	$I_E=10\text{ A}$ $I_C=0$	6.0			V
Collector Cut-Off Current	I_{CBO}	$V_{CB}=400\text{V}$ $I_E=0$			0.1	A
Emitter Cut-Off Current	I_{CES}	$V_{CE}=400\text{V}$ $V_{BE}=0$			1	A
Emitter Base Cut-Off Current	I_{EBO}	$V_{BE}=4.0\text{V}$ $I_C=0$			0.1	A
DC Current Gain	$h_{FE(1)}$	$V_{CE}=10\text{V}$ $I_C=10\text{mA}$	50		200	
	$h_{FE(2)}$	$V_{CE}=10\text{V}$ $I_C=100\text{mA}$	40			
	$h_{FE(3)}$	$V_{CE}=10\text{V}$ $I_C=50\text{mA}$	45			
	$h_{FE(4)}$	$V_{CE}=10\text{V}$ $I_C=1.0\text{mA}$	40			
Collector to Emitter Saturation Voltage	$V_{CE(sat) (1)}$	$I_C=1.0\text{mA}$ $I_B=0.1\text{mA}$			0.4	V
	$V_{CE(sat) (2)}$	$I_C=10\text{mA}$ $I_B=1.0\text{mA}$			0.5	V
	$V_{CE(sat) (3)}$	$I_C=50\text{mA}$ $I_B=5.0\text{mA}$			0.75	V
Emitter to Base Saturation Voltage	$V_{BE(sat)}$	$I_C=10\text{mA}$ $I_B=1.0\text{mA}$			0.75	V
Collector-Base Capacitance	C_{ob}	$V_{CB}=20\text{V}$ $f=1.0\text{MHz}$ $I_E=0$			7.0	pF

SOT-89

单位: mm





H

3D

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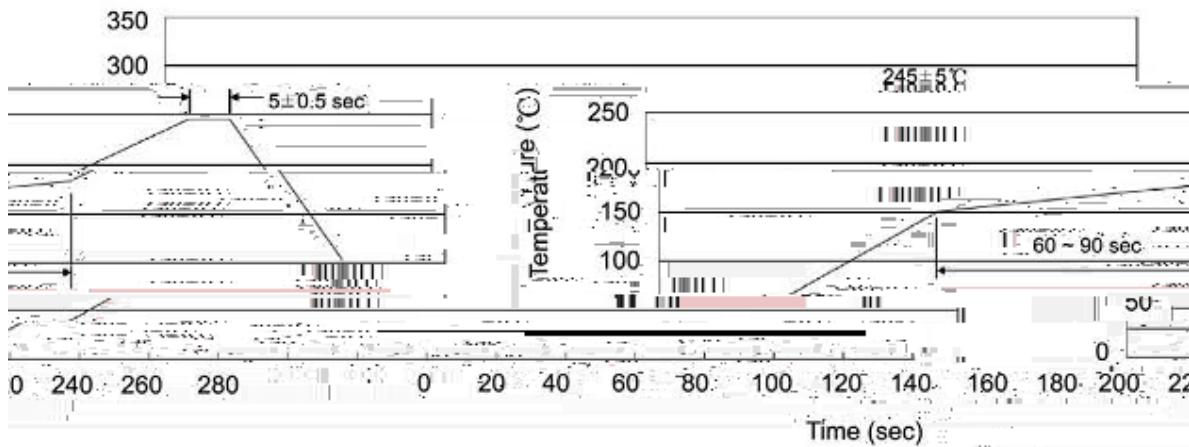
Note:

H: Company Code.

3D: Product Type.

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

Wh p shrdwxrh Prr iioh i rr IU Uhi orw Vroghriq j +Pe-Frhh,



Note:

- | | | | |
|---|---------|-----------|---|
| 1 | 150 180 | 60 90sec; | 1.Preheating:150~180 , Time:60~90sec. |
| 2 | 245±5 | 5±0.5sec; | 2.Peak Temp.:245±5 , Duration:5±0.5sec. |
| 3 | 2 10 | /sec. | 3. Cooling Speed: 2~10 /sec. |

260±5	10±1 sec.	Temp.:260±5	Time:10±1 sec
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/ REEL

Package Type	Units
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