

#### Features

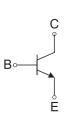
- High voltage: V<sub>CEO</sub>=80V
- High Breakdown Voltage and Current
- Excellent DC Current Gain Linearity
- Low Collector-Emitter Saturation Voltage

## Package Marking and Ordering Information



1. BASE

Product ID	Pack	Marking	Qty(PCS)
H2SD1898	SOT-89	DFQ/DF	1000



#### Maxmim Ratings (Ta=25 unless otherwise noted)

Symbol	Parameter	Value	Unit
V <sub>сво</sub>	Collector-Base Voltage	100	V
V <sub>CEO</sub>	Collector-Emitter Voltage	80	V
V <sub>EBO</sub>	Emitter-Base Voltage	5	V
lc	Collector Current -Continuous	1	A
Pc	Collector Power Dissipation	0.5	W
T <sub>J</sub> ,T <sub>stg</sub>	Operation Junction and Storage Temperature Range	-55~+150	°C

#### Electrcal Charcteristics (Ta=25 unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Max	Unit
Collector-base breakdown voltage	V <sub>(BR)CBO</sub>	I <sub>C</sub> =50μA , I <sub>E</sub> =0	100		V
Collector-emitter breakdown voltage	V <sub>(BR)CEO</sub> *	I <sub>C</sub> = 1mA, I <sub>B</sub> =0	80		V
Emitter-base breakdown voltage	V <sub>(BR)EBO</sub>	Ι <sub>Ε</sub> = 50μΑ, Ι <sub>C</sub> =0	5		V
Collector cut-off current	I <sub>CBO</sub>	V <sub>CB</sub> =80V, I <sub>E</sub> =0		1	μA
Emitter cut-off current	I <sub>EBO</sub>	V <sub>EB</sub> =4V, I <sub>C</sub> =0		1	μA
DC current gain	h <sub>FE</sub>	V <sub>CE</sub> =5V, I <sub>C</sub> =200mA	120	390	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I <sub>C</sub> =500m A, I <sub>B</sub> =20mA		0.4	V
Transition frequency	f <sub>T</sub>	V <sub>CE</sub> =10V, I <sub>C</sub> =200mA	100		MHz
Collector output capacitance	C <sub>ob</sub>	V <sub>CB</sub> =10V,I <sub>E</sub> =0,f=1MHz		20	pF

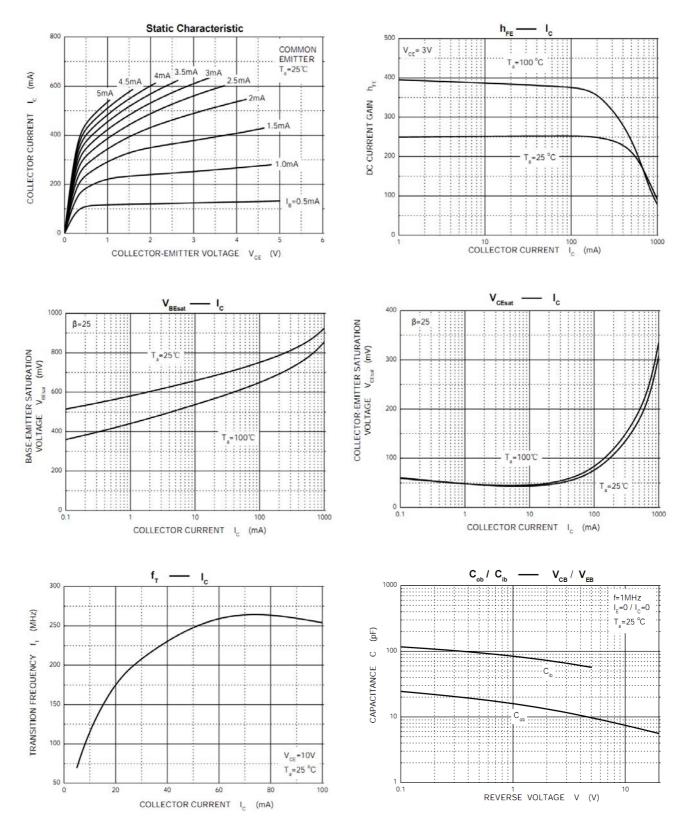
<sup>\*</sup>pulse test

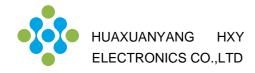
## **Classifiction Of hFE**

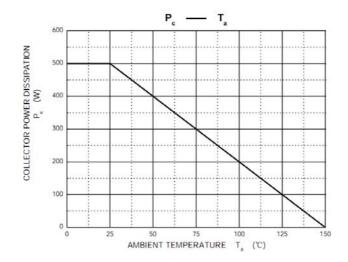
Rank	H2SD1898T100Q	H2SD1898T100R	
Range	120-270	180-390	
Marking	DFQ	DF	



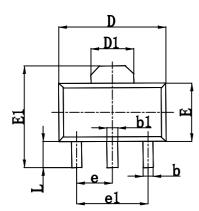
## **Typical Characteristics**

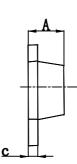






# SOT-89 Package Outline Dimensions





Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
А	1.400	1.600	0.055	0.063
b	0.320	0.520	0.013	0.020
b1	0.400	0.580	0.016	0.023
С	0.350	0.440	0.014	0.017
D	4.400	4.600	0.173	0.181
D1	1.550 REF.		0.061 REF.	
Е	2.300	2.600	0.091	0.102
E1	3.940	4.250	0.155	0.167
е	1.500 TYP.		0.060 TYP.	
e1	3.000 TYP.		0.118 TYP.	
Ĺ	0.900	1.200	0.035	0.047



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