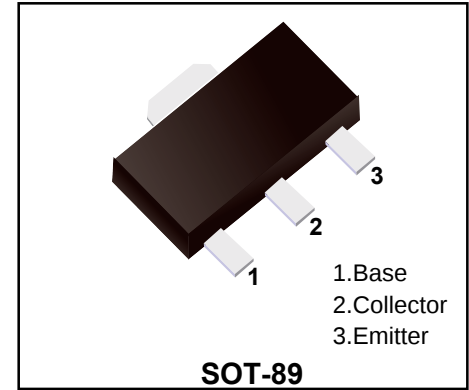


TRANSISTOR (NPN)



FEATURES

- ◆Low $V_{CE(sat)}$
- ◆Large current capacity

Absolute Maximum Ratings ($T_a=25^{\circ}\text{C}$)

Characteristics	Symbols	Value	Units
Collector-Base Voltage	V_{CBO}	70	V
Collector-Emitter Voltage	V_{CEO}	70	V
Emitter-Base Voltage	V_{EBO}	6	V
Collector Current -Continuous	I_C	3	A
Collector Power Dissipation	P_C	500	mW
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	250	$^{\circ}\text{C/W}$
Thermal Resistance from Junction to Case	$R_{\theta JC}$	35	$^{\circ}\text{C/W}$
Junction Temperature	T_J	-55 to +150	$^{\circ}\text{C}$
Storage Temperature	T_{STG}	-55 to +150	$^{\circ}\text{C}$

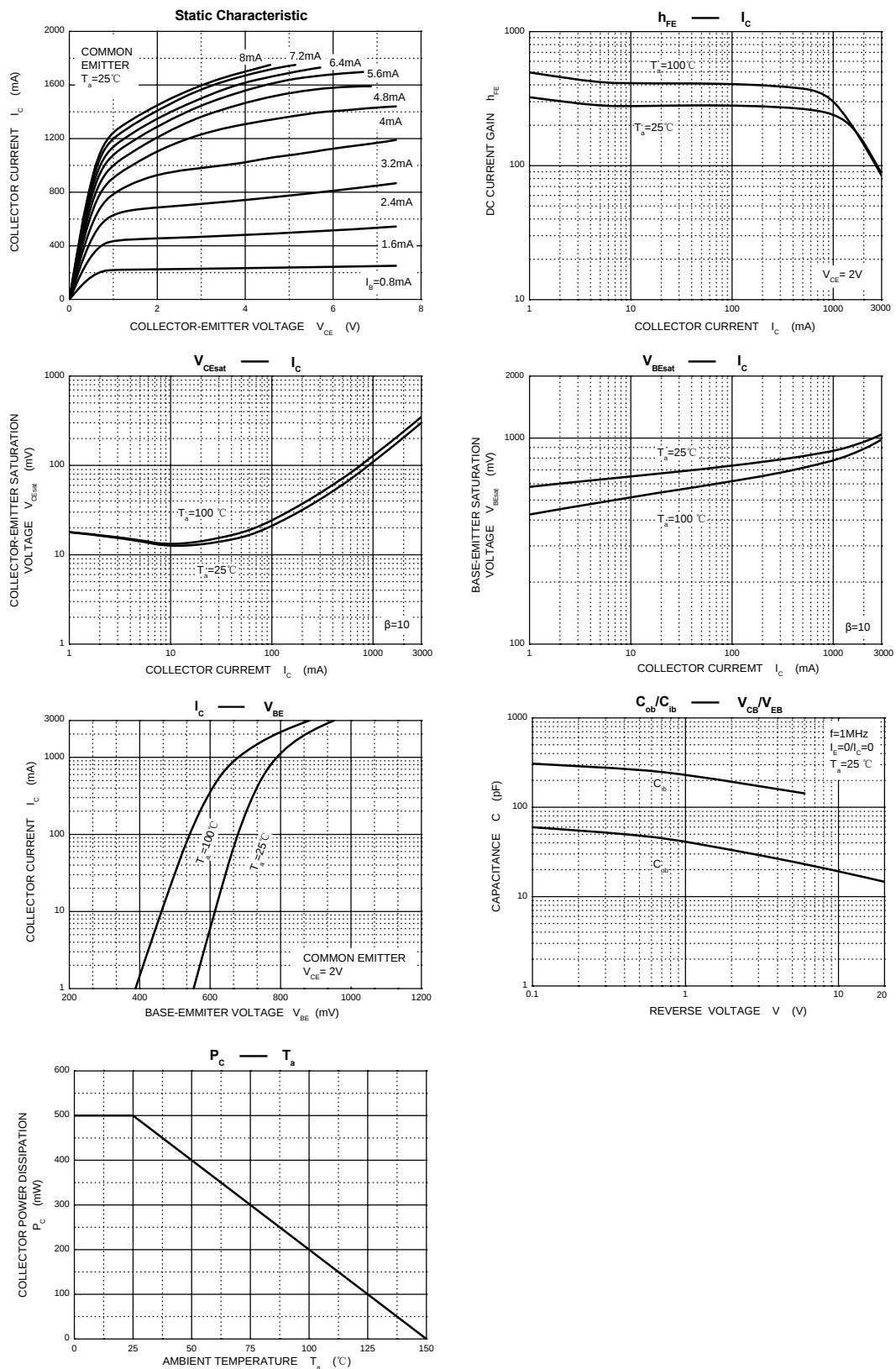
ELECTRICAL CHARACTERISTICS ($T_a=25^{\circ}\text{C}$)

CHARACTERISTIC	SYMBOL	TEST CONDITIONS	MIN.	TYP.	MAX.	UNIT
Collector Power Dissipation	$V_{(BR)CBO}$	$I_C=100\mu\text{A}$, $I_E=0$	70	-	-	V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=10\text{mA}$, $I_B=0$	70	-	-	V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=100\mu\text{A}$, $I_C=0$	6	-	-	V
Collector cut-off current	I_{CBO}	$V_{CB}=40\text{V}$, $I_E=0$	-	-	1	μA
Collector cut-off current	I_{CEO}	$V_{CE}=30\text{V}$, $I_B=0$	-	-	10	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=6\text{V}$, $I_C=0$	-	-	1	μA
DC current gain	h_{FE}	$V_{CE}=2\text{V}$, $I_C=1\text{A}$	60	-	400	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=2\text{A}$, $I_B=0.2\text{A}$	-	-	0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C=2\text{A}$, $I_B=0.2\text{A}$	-	-	1.5	V
Transition frequency	f_T	$V_{CE}=5\text{V}$, $I_C=0.1\text{A}$, $f=10\text{MHz}$	50	-	-	MHz

h_{FE} Classification

Type	2SD882HSI-R	2SD882HSI-Q	2SD882HSI-P	2SD882HSI-E
Range	60-120	100-200	160-320	200-400
Marking	D882H R	D882H Q	D882H P	D882H E

Typical Characteristics



Ordering information

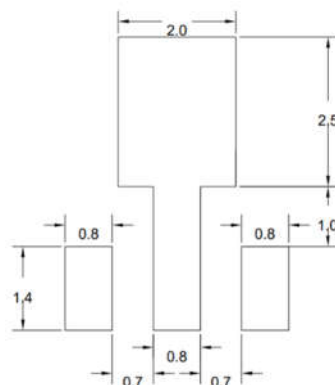
Package	Packing Description	Base Quantity	Packing Quantity
SOT-89	Tape/Reel, 7" reel	3000pcs/Reel	30000PCS/Carton

Package Dimensions

SOT-89

Dim	Millimeter		Inches	
	Min.	Max.	Min.	Max.
A	1.40	1.60	0.055	0.063
b	0.32	0.52	0.013	0.020
b1	0.38	0.58	0.015	0.023
c	0.35	0.45	0.014	0.018
D	4.40	4.60	0.173	0.181
D1	1.45	1.65	0.057	0.065
D2	1.70	1.80	0.067	0.071
E	2.30	2.60	0.091	0.102
E1	3.95	4.25	0.156	0.167
E2	1.80	2.00	0.071	0.079
e	1.40	1.60	0.055	0.063
e1	2.80	3.20	0.110	0.126
L	0.90	1.20	0.035	0.047

The recommended mounting pad size



UNIT:MM

Disclaimer

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