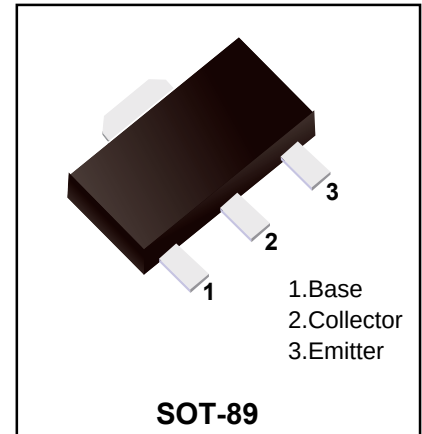


NPN Transistors

Features

- Excellent h_{FE} linearity and high h_{FE}
 $h_{FE} = 60$ to 400 ($V_{CE} = 2\text{ V}$, $I_C = 1\text{ A}$)



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

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	40	V
Collector to Emitter Voltage	V_{CEO}	30	V
Emitter to Base Voltage	V_{EBO}	6	V
Collector Current to Continuous	I_C	3	A
Collector Dissipation	P_C	0.5	W
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature	T_{stg}	-55 to 150	$^\circ\text{C}$

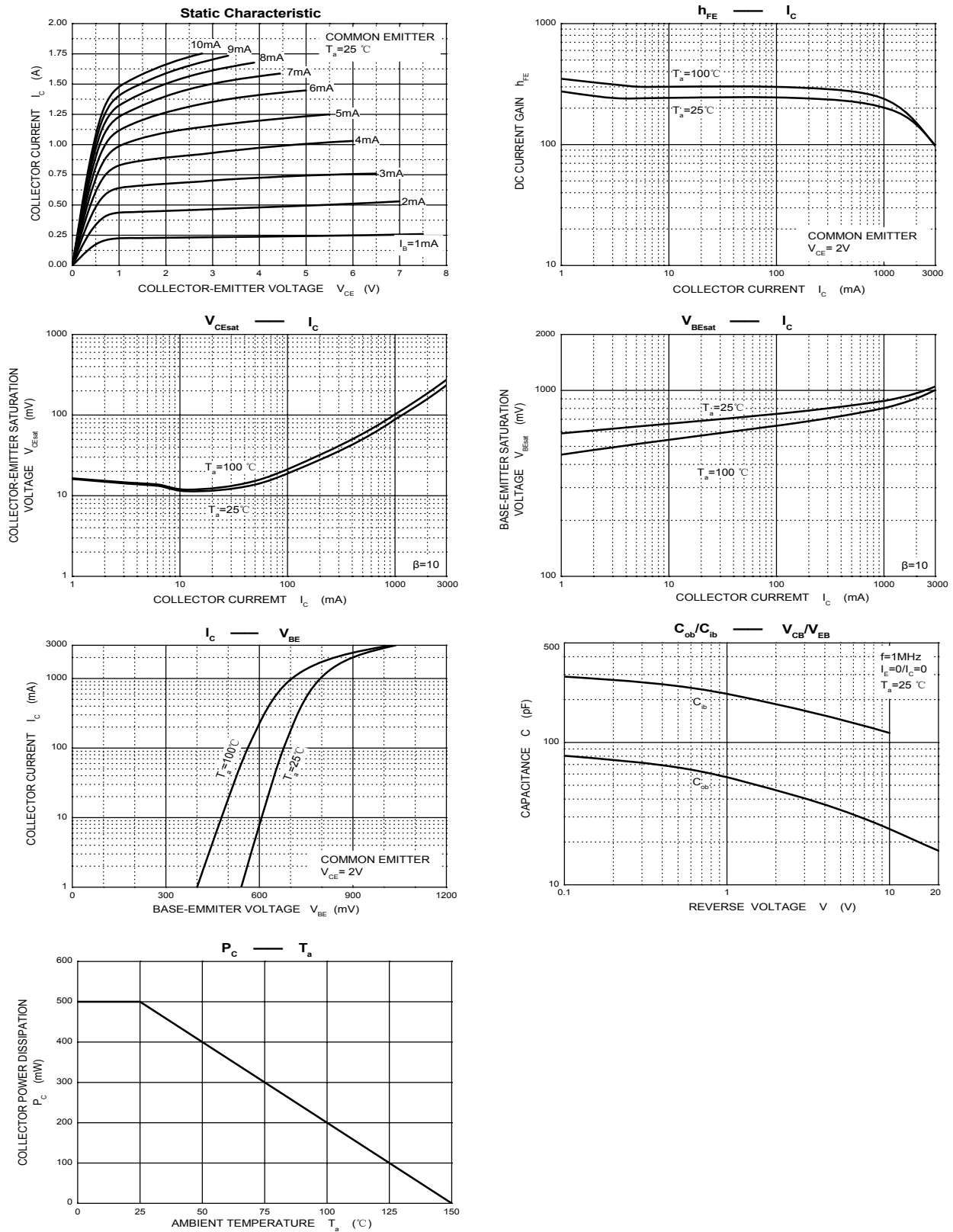
Electrical Characteristics ($T_a=25^\circ\text{C}$)

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V_{CBO}	$I_C=100\mu\text{A}$, $I_E=0$	40			V
Collector-emitter breakdown voltage	V_{CEO}	$I_C=10\text{ mA}$, $I_B=0$	30			V
Emitter-base breakdown voltage	V_{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	
		$V_{CE}=2\text{ V}$, $I_C=100\text{ mA}$	32			
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	$V_{CE}=5\text{ V}$, $I_C=0.1\text{ mA}$, $f=10\text{ MHz}$	50			MHz

h_{FE} Classification

Type	2SD882-R	2SD882-Q	2SD882-P	2SD882-E
Range	60-120	100-200	160-320	200-400
Marking	882R	882Q	D882	882E

Typical Characteristics



Ordering information

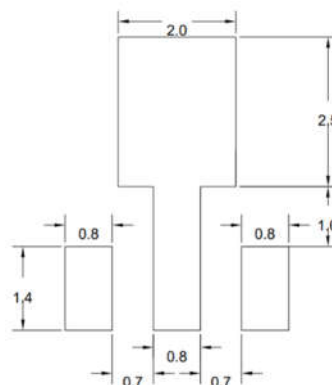
Package	Packing Description	Base Quantity	Packing Quantity
SOT-89	Tape/Reel, 7" reel	1000pcs/Reel	6000PCS/Box 30000PCS/Carton

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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