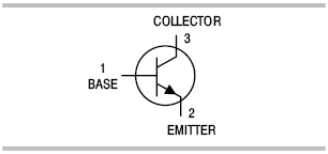
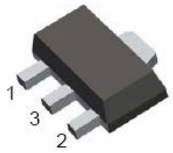
D882H

SOT-89 Bipolar Transistor(NPN)

FEATURES

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





SOT-89

ORDERING INFORMATION

Type No.	Marking	Package Code
D882H	D882H	SOT-89

MAXIMUM RATING @ Ta=25℃ unless otherwise specified

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	70	V
V_{CEO}	Collector-Emitter Voltage	70	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current -Continuous	3	A
P_C	Collector Dissipation	500	mW
$R_{\Theta JA}$	Thermal Resistance from Junction to Ambient	250	℃/W
T_J	Junction Temperature	150	℃
T_{STG}	Storage Temperature Range	-55 to +150	℃

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ELECTRICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

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

CLASSIFICATION OF h_{FE}

Rank	R	Q	P	E
Range	60-120	100-200	160-320	200-400

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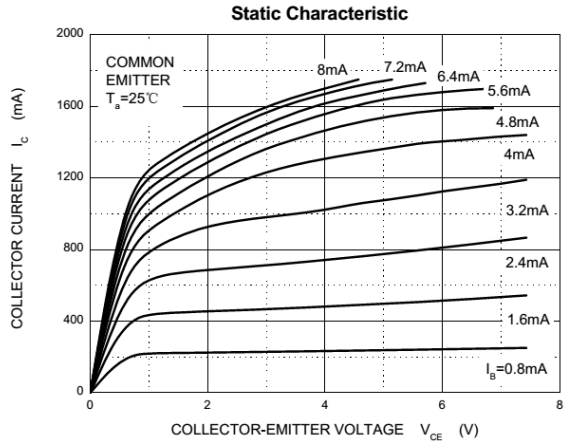
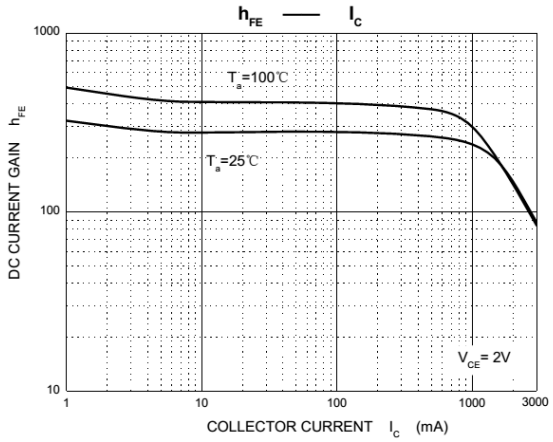
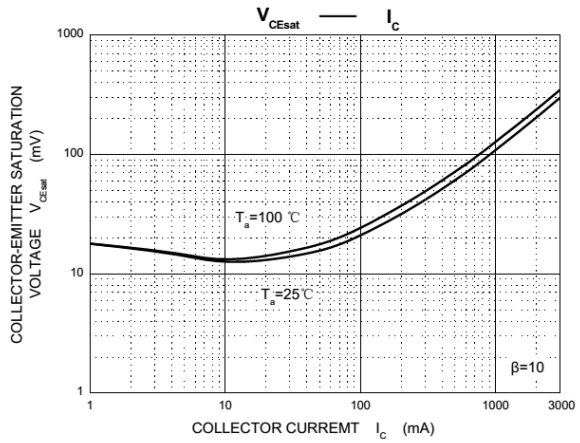
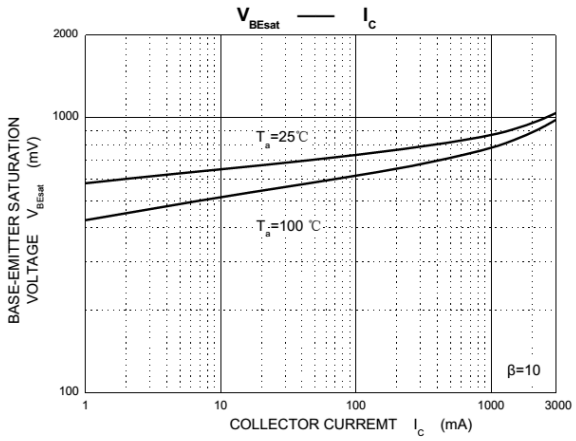
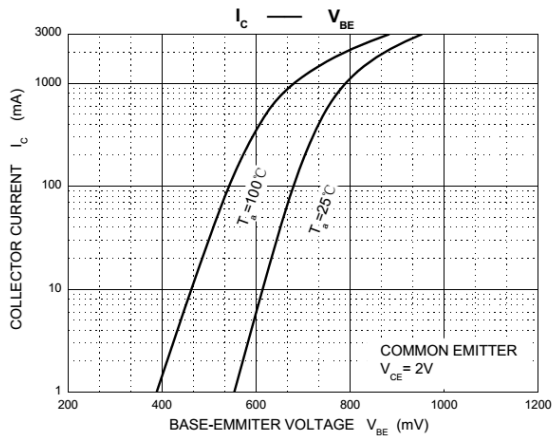
TYPICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

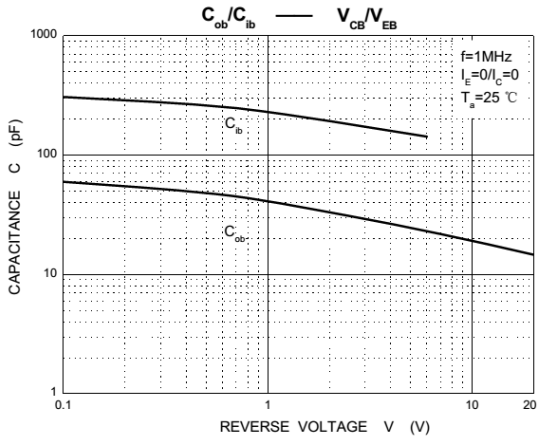












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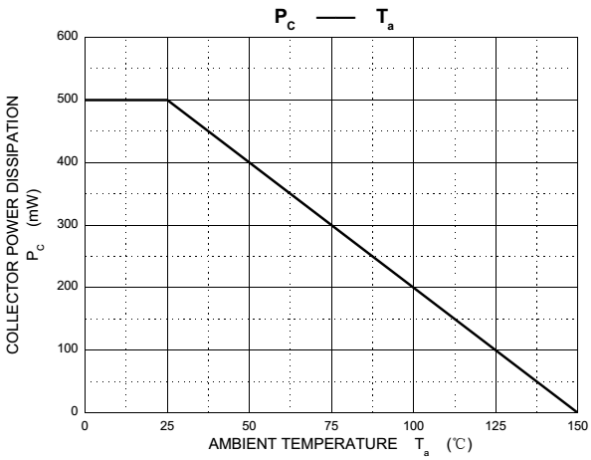

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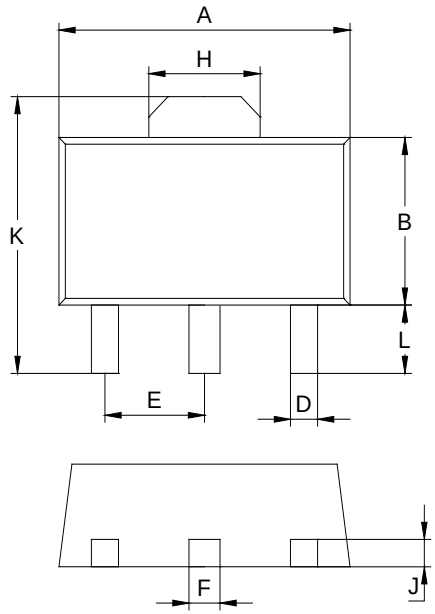
SOT-89 Bipolar Transistor(NPN)

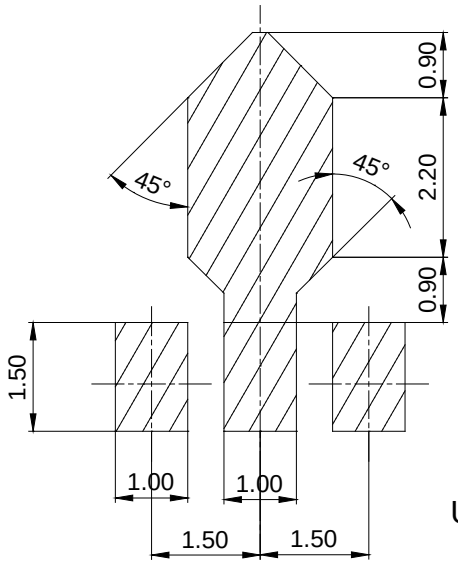
PACKAGE OUTLINE

Plastic surface mounted package SOT-89



SOT-89		
Dim	Min	Max
A	4.30	4.70
B	2.25	2.65
C	1.30	1.70
D	0.30	0.50
E	1.40	1.60
F	0.38	0.58
H	1.60	1.80
J	0.30	0.50
L	0.90	1.10
K	3.95	4.35
All Dimensions in mm		

SOLDERING FOOTPRINT



Unit: mm

Package	Reel	Reel Size	Box	Box Size(mm)	Carton	Carton Size(mm)
SOT -89	1000pcs	7inch	10,000pcs	203×203×195	40,000pcs	438×438×220