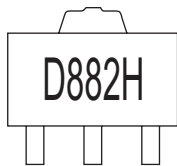


2SD882H TRANSISTOR (NPN)

FEATURE

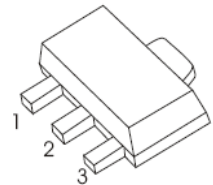
- Low $V_{CE(sat)}$
- Large current capacity

MARKING



SOT-89-3L

1. BASE
2. COLLECTOR
3. EMITTER



MAXIMUM RATINGS ($T_a=25^\circ\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Unit
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	3	A
P_C	Collector Power Dissipation	500	mW
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	250	$^\circ\text{C}/\text{W}$
$R_{\theta JC}$	Thermal Resistance from Junction to Case	35	$^\circ\text{C}/\text{W}$
T_J, T_{stg}	Operation Junction and Storage Temperature Range	-55~+150	$^\circ\text{C}$

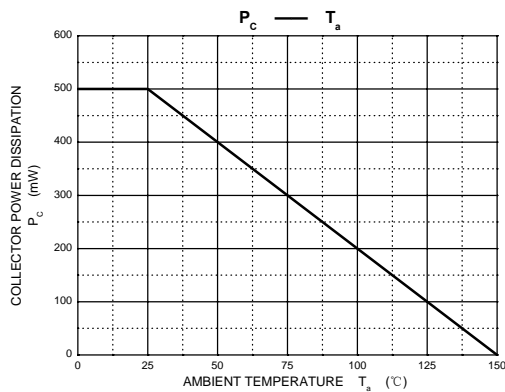
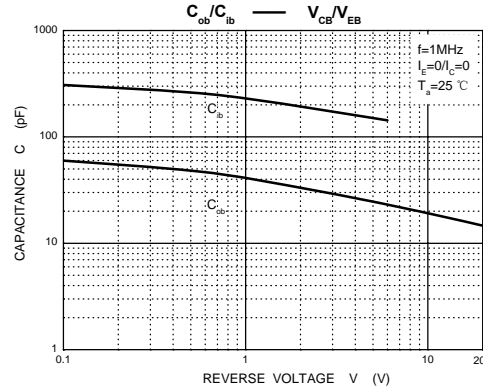
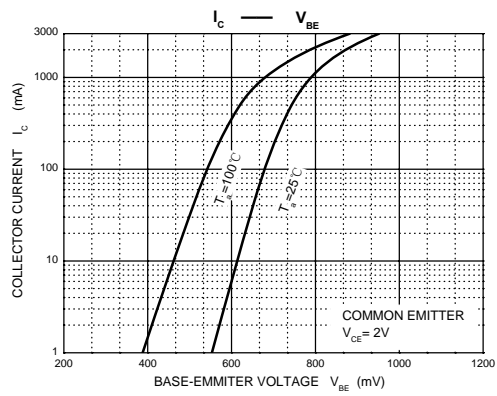
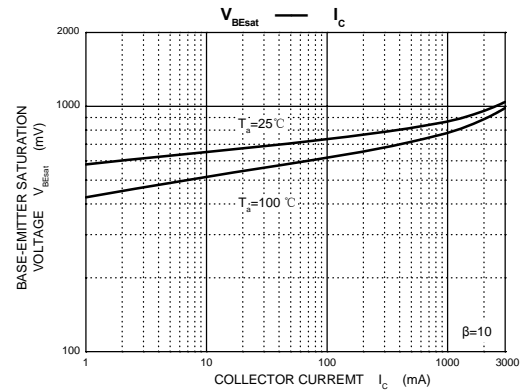
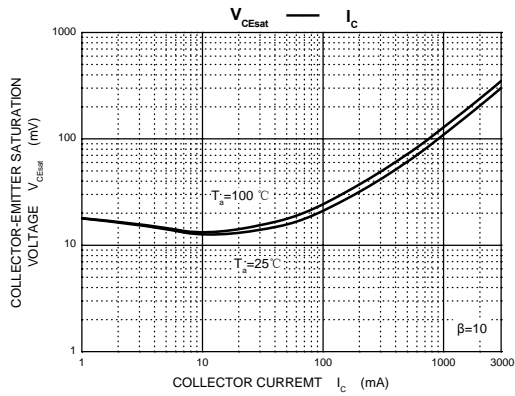
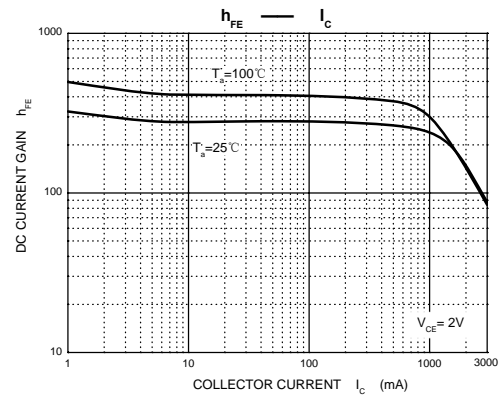
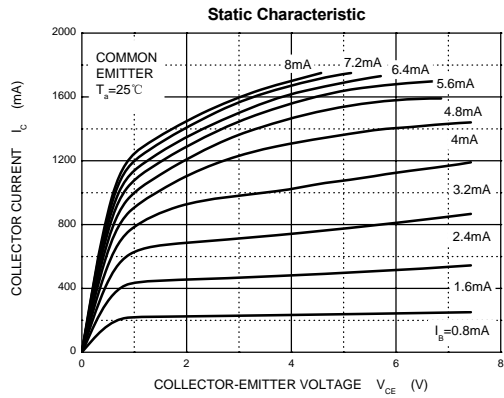
ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=100\mu\text{A}, I_E=0$	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

CLASSIFICATION of h_{FE}

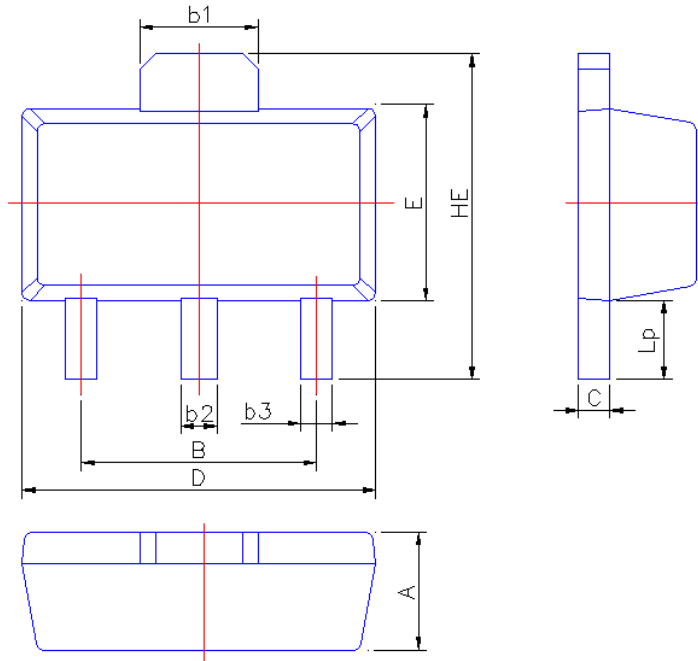
Rank	R	O	Y	GR
Range	60-120	100-200	160-320	200-400

Typical Characteristics





SOT-89 PACKAGE OUTLINE



Symbol	Dimension in Millimeters	
	Min	Max
A	1.40	1.60
B	2.95	3.05
b1	1.45	1.70
b2	0.45	0.56
b3	0.35	0.50
C	0.35	0.50
D	4.40	4.60
E	2.35	2.55
HE	3.90	4.40
Lp	0.90	1.10