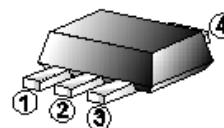


RoHS Compliant Product  
A suffix of "-C" specifies halogen & lead-free

## FEATURES

- Small Flat Package.
- High DC Current Gain
- Low  $V_{CE(sat)}$

## SOT-89



## MARKING

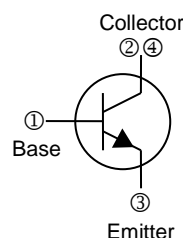
D882H

## PACKAGE INFORMATION

Package	MPQ	Leader Size
SOT-89	1K	7 inch

## ORDER INFORMATION

Part Number	Type
BCP882H-Y-C	Lead (Pb)-free and Halogen-free



## ABSOLUTE MAXIMUM RATINGS ( $T_A=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Rating	Unit
Collector-Base Voltage	$V_{CBO}$	70	V
Collector-Emitter Voltage	$V_{CEO}$	70	V
Emitter-Base Voltage	$V_{EBO}$	6	V
Continuous Collector Current	$I_C$	3	A
Repetitive Peak Collector Current <sup>1</sup>	$I_{CRP}$	4	
Peak Collector Current <sup>2</sup>	$I_{CP}$	5	
Collector Power Dissipation	$P_C$	500	mW
Thermal Resistance Junction-Ambient	$R_{\theta JA}$	250	$^\circ\text{C/W}$
Thermal Resistance Junction-Case	$R_{\theta JC}$	35	
Junction, Storage Temperature Range	$T_J, T_{STG}$	150, -55~150	$^\circ\text{C}$

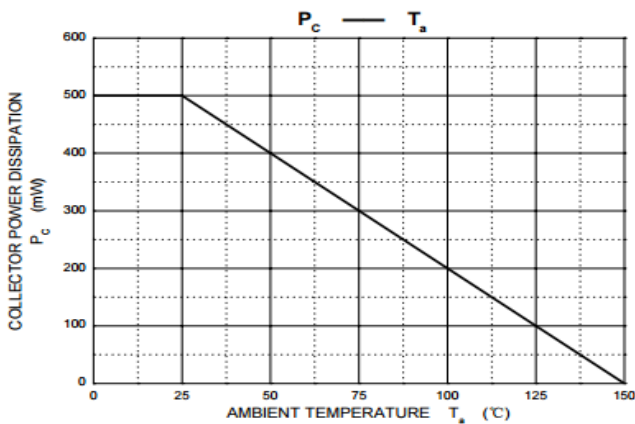
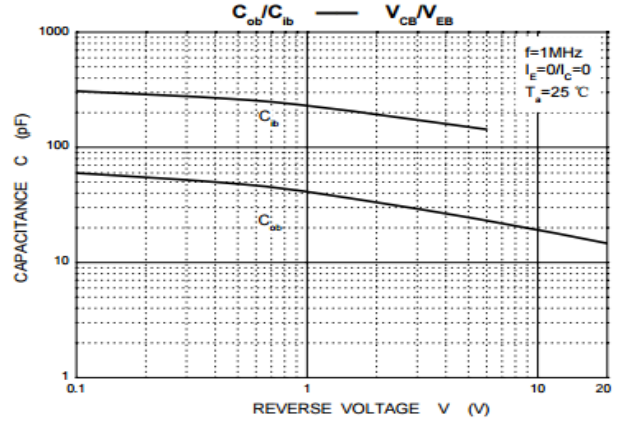
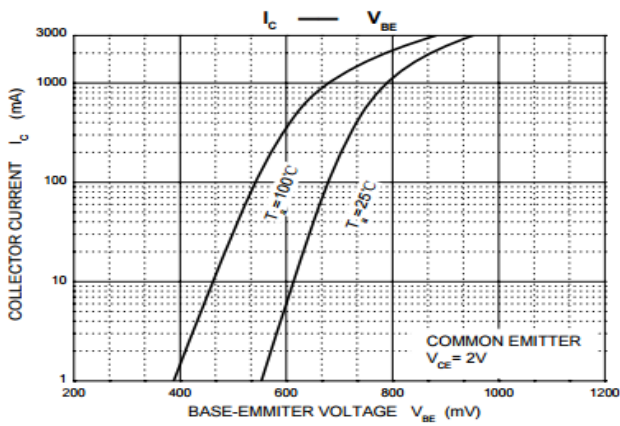
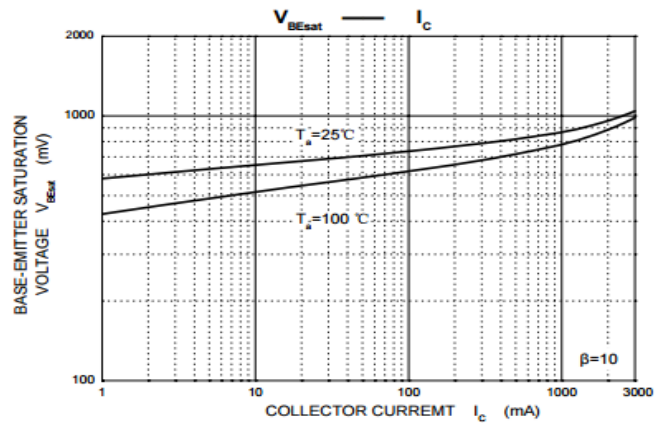
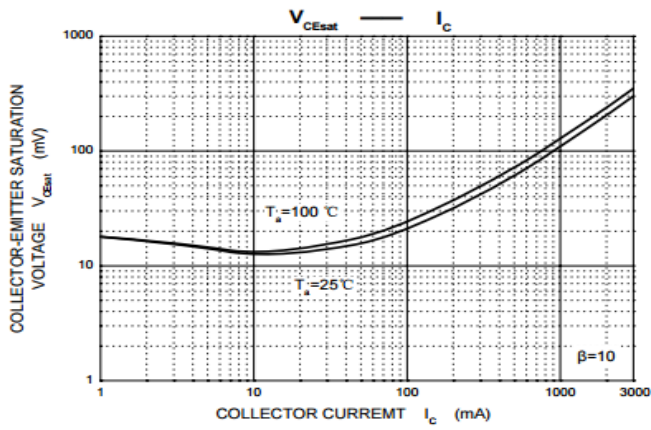
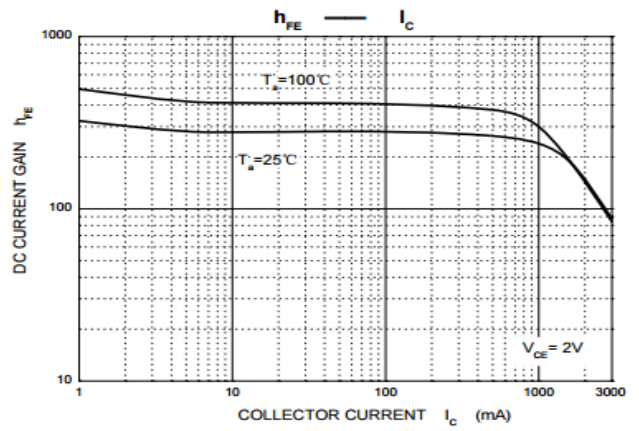
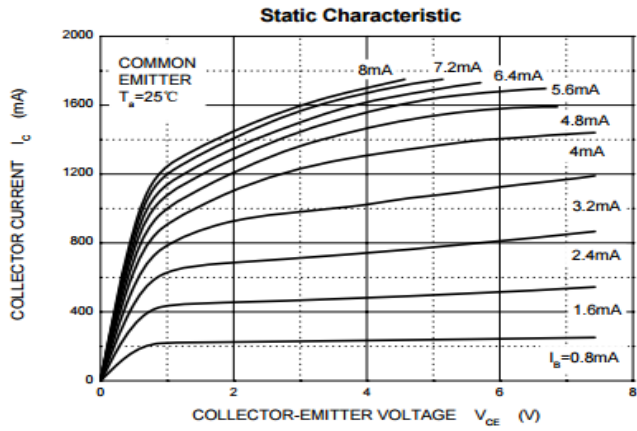
Notes:

1. Pulse Width=1ms, Single Pulse.
2. Pulse Width=380 $\mu\text{s}$ , Single Pulse.

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

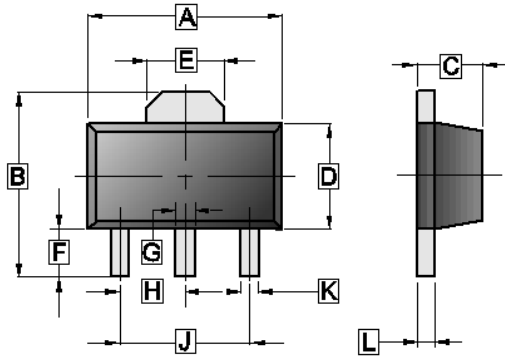
Parameter	Symbol	Min.	Typ.	Max.	Unit	Test condition
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	70	-	-	V	$I_C=100\mu\text{A}, I_E=0$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	70	-	-	V	$I_C=10\text{mA}, I_B=0$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	6	-	-	V	$I_E=100\mu\text{A}, I_C=0$
Collector Cut-off Current	$I_{CBO}$	-	-	1	$\mu\text{A}$	$V_{CB}=40\text{V}, I_E=0$
Collector Cut-off Current	$I_{CEO}$	-	-	10		$V_{CE}=30\text{V}, I_B=0$
Emitter Cut-off Current	$I_{EBO}$	-	-	1		$V_{EB}=6\text{V}, I_C=0$
DC Current Gain	$h_{FE}$	160	-	320		$V_{CE}=2\text{V}, I_C=1\text{A}$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	-	-	0.5	V	$I_C=2\text{A}, I_B=0.2\text{A}$
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	-	-	1.5	V	$I_C=2\text{A}, I_B=0.2\text{A}$
Transition Frequency	$f_T$	-	50	-	MHz	$V_{CE}=5\text{V}, I_C=0.1\text{A}, f=10\text{MHz}$

**CHARACTERISTIC CURVES**



**PACKAGE OUTLINE DIMENSIONS**

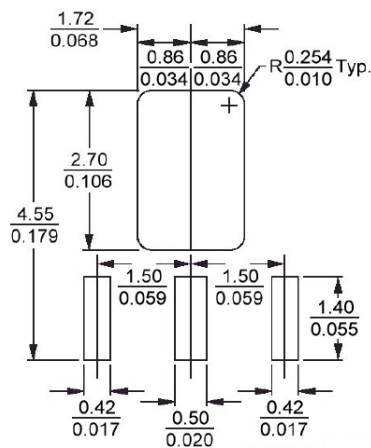
**SOT-89**



REF.	Millimeter	
	Min.	Max.
A	4.40	4.60
B	3.94	4.25
C	1.40	1.60
D	2.25	2.60
E	1.55 TYP.	
F	0.89	1.20
G	0.40	0.58
H	1.50 TYP.	
J	3.00 TYP.	
K	0.32	0.52
L	0.35	0.44

**MOUNTING PAD LAYOUT**

**SOT-89**



\*Dimensions in millimeters