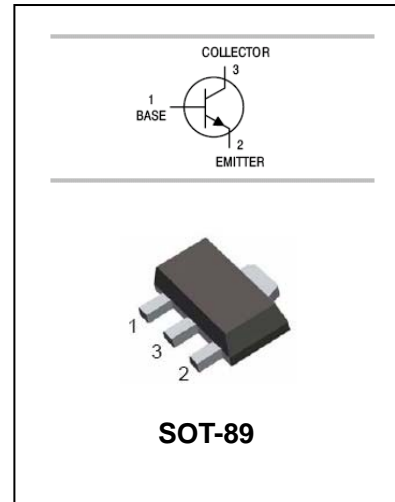


# NPN Silicon Epitaxial Planar Transistor

# 2SC2881

## FEATURES

- High voltage:  $V_{CEO}=120V$
- High transition frequency;  $f_T=120MHz$ .
- $P_C=500mW$ .
- Complements the 2SA1201.



## APPLICATIONS

- Power and voltage amplifier application.

## ORDERING INFORMATION

Type No.	Marking	Package Code
2SC2881	CO1/CY1	SOT-89

## MAXIMUM RATING @ $T_a=25^\circ C$ unless otherwise specified

Symbol	Parameter	Value	Units
$V_{CBO}$	Collector-Base Voltage	120	V
$V_{CEO}$	Collector-Emitter Voltage	120	V
$V_{EBO}$	Emitter-Base Voltage	5	V
$I_C$	Collector Current -Continuous	0.8	A
$I_B$	Base current	0.16	A
$P_C$	Collector Dissipation	500	mW
$T_j, T_{stg}$	Junction and Storage Temperature	-55 to +150	$^\circ C$

**NPN Silicon Epitaxial Planar Transistor**
**2SC2881**
**ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified**

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=1mA, I_E=0$	120			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=10mA, I_B=0$	120			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=1mA, I_C=0$	5			V
Collector cut-off current	$I_{CBO}$	$V_{CB}=120V, I_E=0$			0.1	$\mu A$
Emitter cut-off current	$I_{EBO}$	$V_{EB}=5V, I_C=0$			0.1	$\mu A$
DC current gain	$h_{FE}$	$V_{CE}=5V, I_C=100mA$	80		240	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=500mA, I_B=50mA$			1	V
Base-emitter voltage	$V_{BE}$	$V_{CE}=5V, I_B=500mA$			1	V
Transition frequency	$f_T$	$V_{CE}=5V, I_C=100mA$		120		MHz
Collector output capacitance	$C_{ob}$	$V_{CB}=10V, I_E=0, f=1MHz$			30	pF

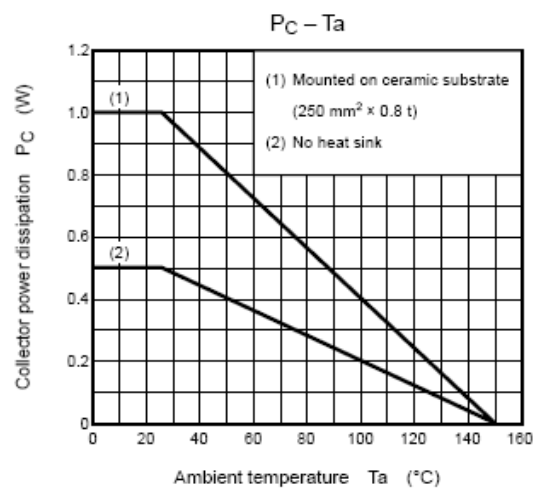
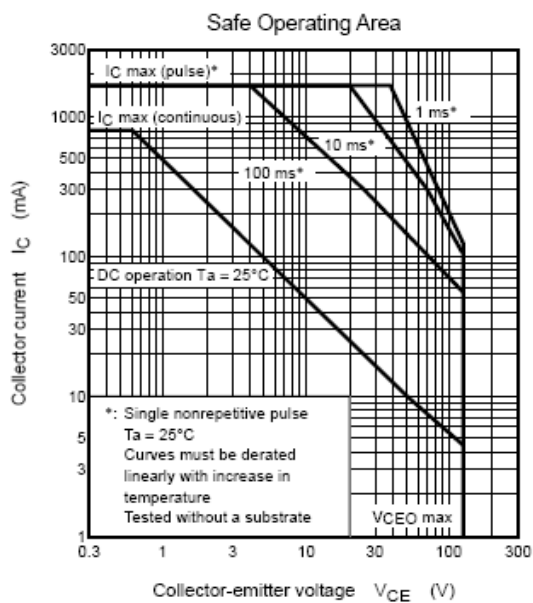
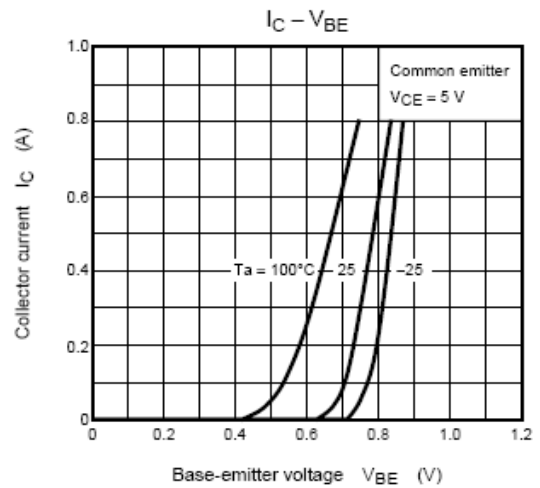
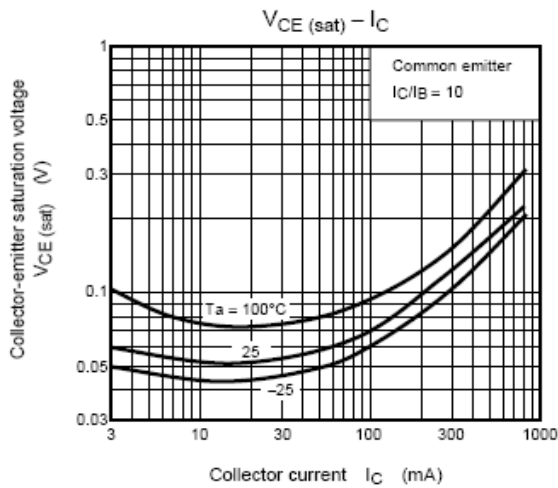
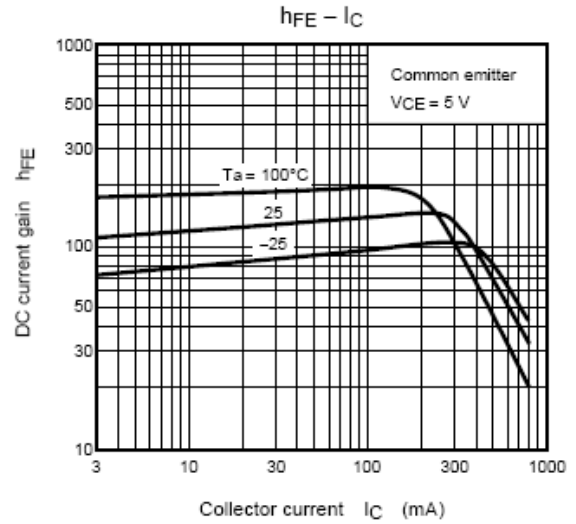
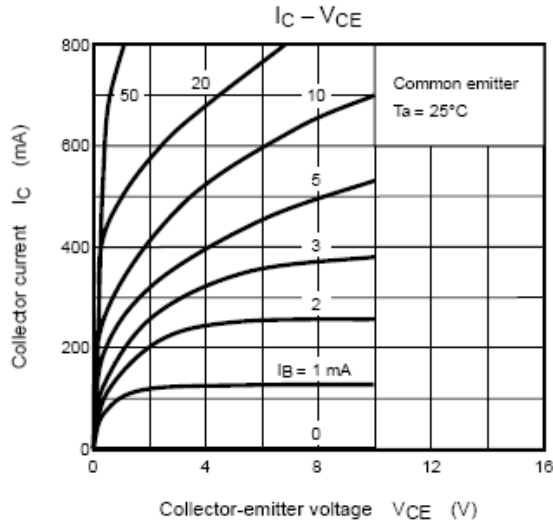
**CLASSIFICATION OF  $h_{FE}$** 

Rank	O	Y
Range	80-160	120-240
MARKING	CO1	CY1

**NPN Silicon Epitaxial Planar Transistor**

**2SC2881**

**TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified**



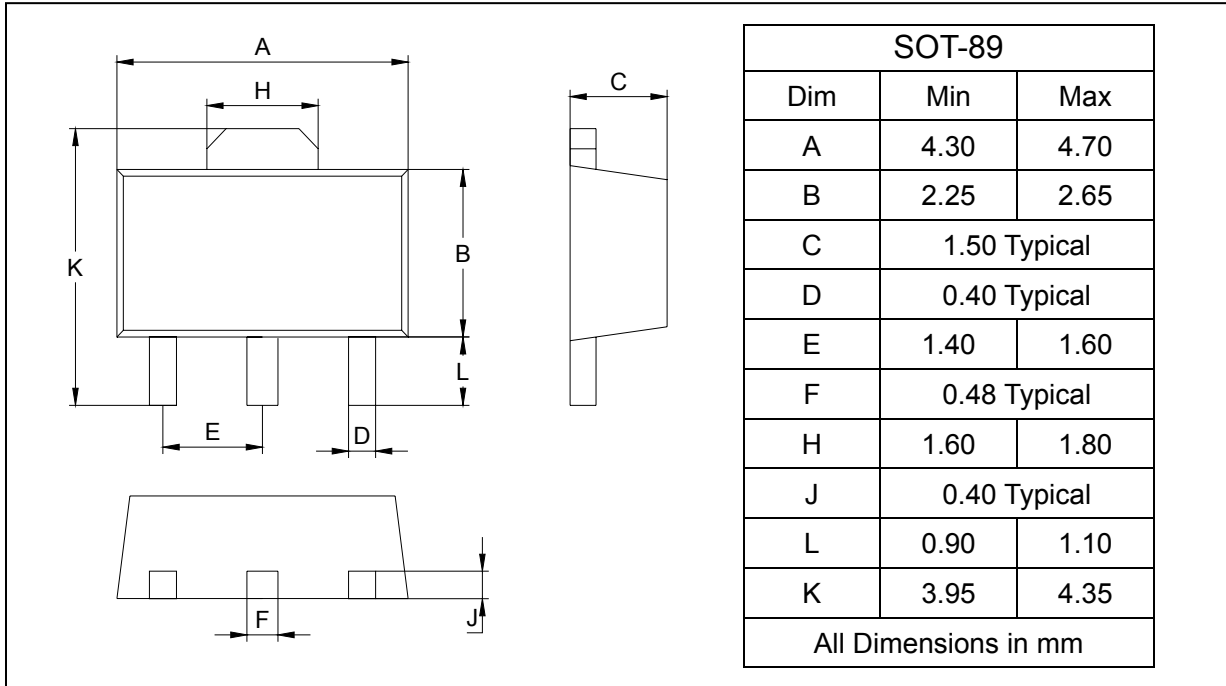
**NPN Silicon Epitaxial Planar Transistor**

**2SC2881**

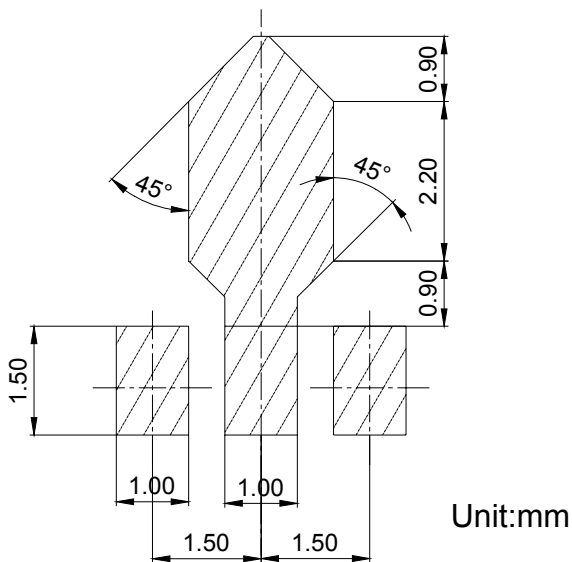
**PACKAGE OUTLINE**

Plastic surface mounted package

SOT-89



**SOLDERING FOOTPRINT**



**PACKAGE INFORMATION**

Device	Package	Shipping
2SC2881	SOT-89	1000/Tape&Reel

[www.s-manuals.com](http://www.s-manuals.com)