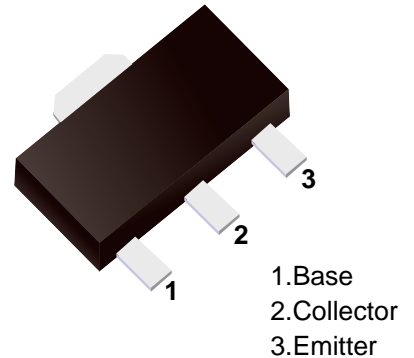


■ NPN Transistors



■ Simplified outline(SOT-89)

■ Features

- Small Flat Package
- High Transition Frequency
- High Voltage
- Complementary to 2SA1201

■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V _{CB0}	120	V
Collector - Emitter Voltage	V _{CE0}	120	
Emitter - Base Voltage	V _{EB0}	5	
Collector Current - Continuous	I _c	800	mA
Base Current	I _B	160	
Collector Power Dissipation	P _c	500	mW
Thermal Resistance From Junction To Ambient	R _{θJA}	250	°C/W
Junction Temperature	T _J	150	°C
Storage Temperature Range	T _{stg}	-55 to 150	

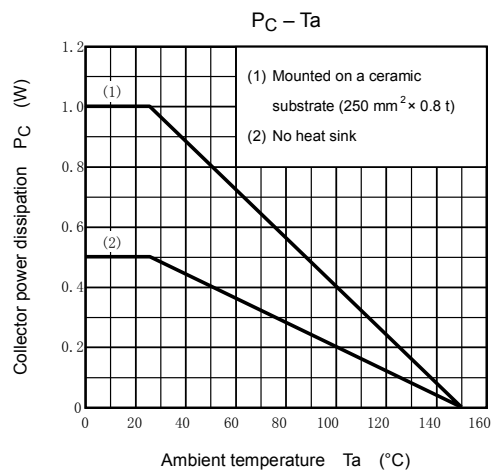
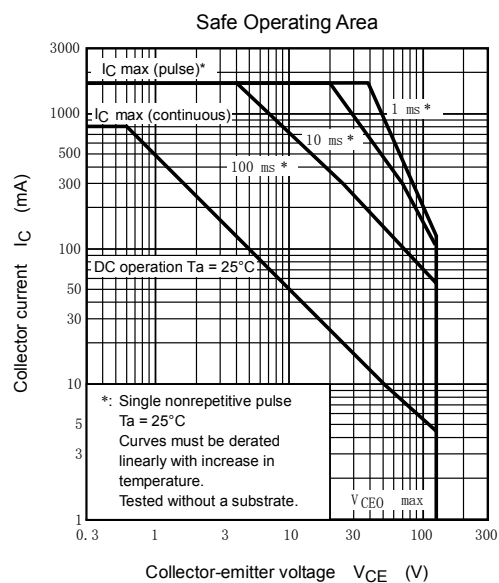
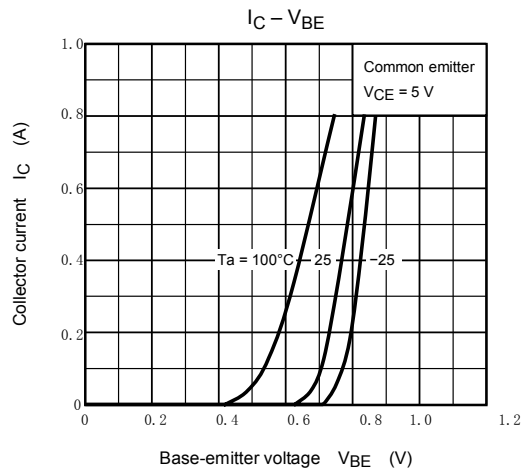
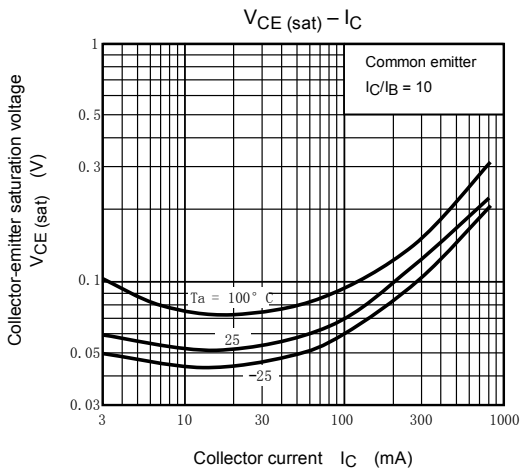
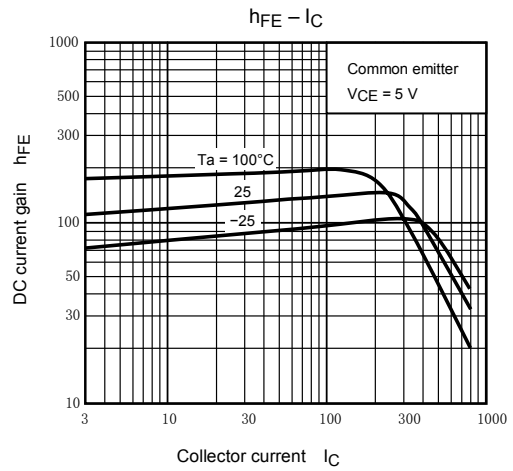
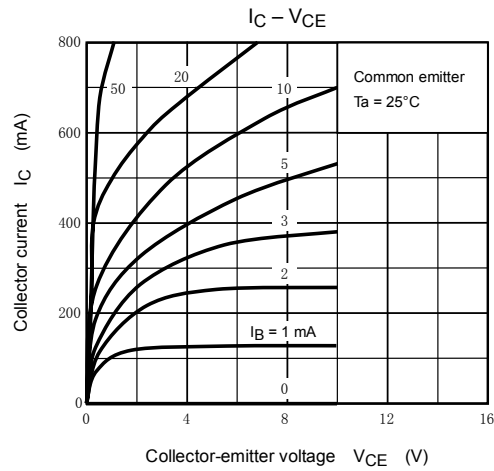
■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V _{CB0}	I _c = 100u A, I _E = 0	120			V
Collector- emitter breakdown voltage	V _{CE0}	I _c = 10mA, I _B = 0	120			
Emitter - base breakdown voltage	V _{EB0}	I _E = 100uA, I _c = 0	5			
Collector-base cut-off current	I _{CB0}	V _{CB} = 120V, I _E = 0			0.1	uA
Emitter cut-off current	I _{EB0}	V _{EB} = 5V, I _c =0			0.1	
Collector-emitter saturation voltage	V _{CE(sat)}	I _c =500 mA, I _B =50mA			1	V
Base - emitter saturation voltage	V _{BE(sat)}	I _c =500 mA, I _B =50mA			1.2	
Base - emitter voltage	V _{BE}	V _{CE} = 5V, I _c = 0.5A			1	
DC current gain	h _{FE}	V _{CE} = 5V, I _c = 100mA	80		240	
Collector output capacitance	C _{ob}	V _{CB} = 10V, I _E = 0, f=1MHz			30	pF
Transition frequency	f _t	V _{CE} = 5V, I _c = 100mA		120		MHz

■ Classification of h_{FE}

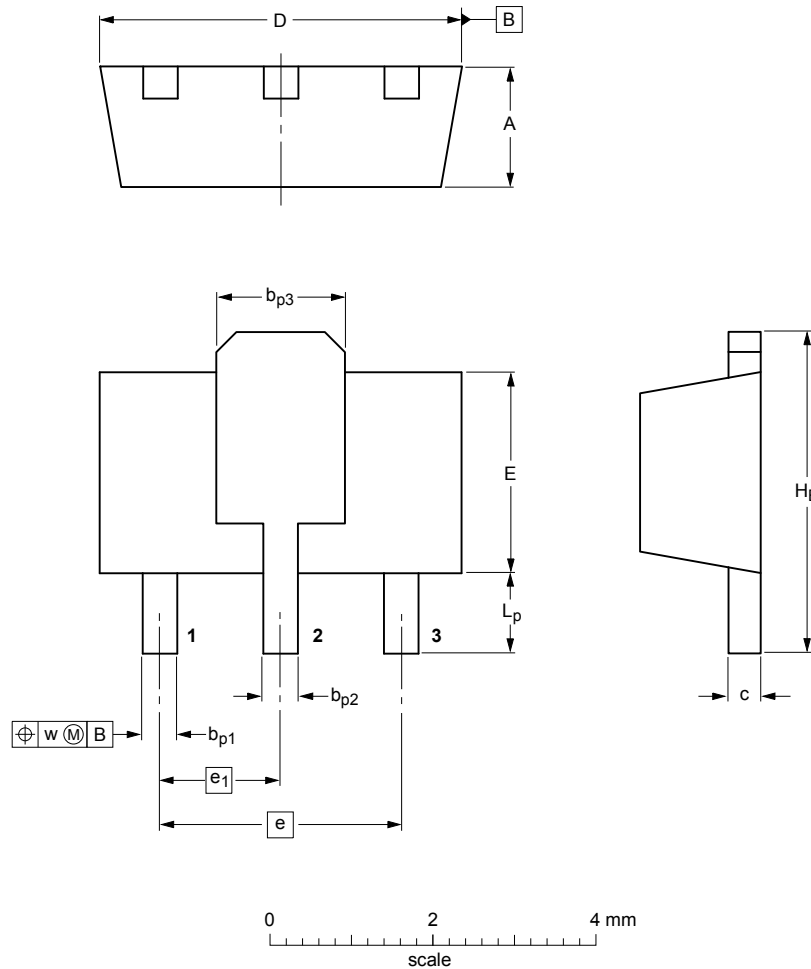
Type	2SC2881-O	2SC2881-Y
Range	80-160	120-240
Marking	CO*	CY*

■ Typical Characteristics



Package Outline

SOT-89



DIMENSIONS (mm are the original dimensions)

UNIT	A	b_{p1}	b_{p2}	b_{p3}	c	D	E	e	e_1	H_E	L_p	w
mm	1.6 1.4	0.48 0.35	0.53 0.40	1.8 1.4	0.44 0.23	4.6 4.4	2.6 2.4	3.0	1.5	4.25 3.75	1.2 0.8	0.13

Summary of Packing Options

Package	Package Description	Packing Quantity	Industry Standard
SOT-89	Tape/Reel, 7" reel	1000	EIA-481-1