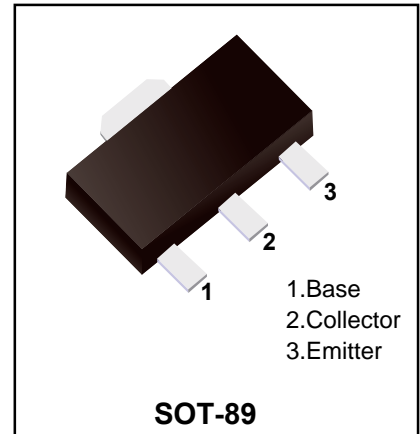


NPN Transistors



Features

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

Absolute Maximum Rating (Ta=25°C)

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V _{CB0}	120	V
Collector - Emitter Voltage	V _{CEO}	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	

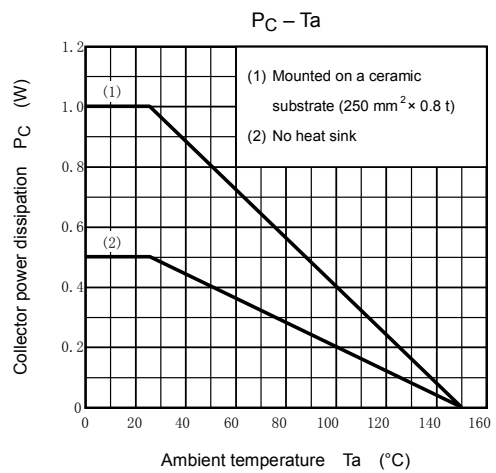
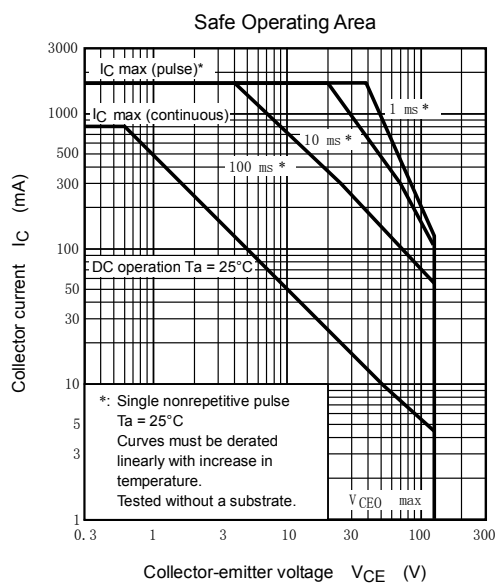
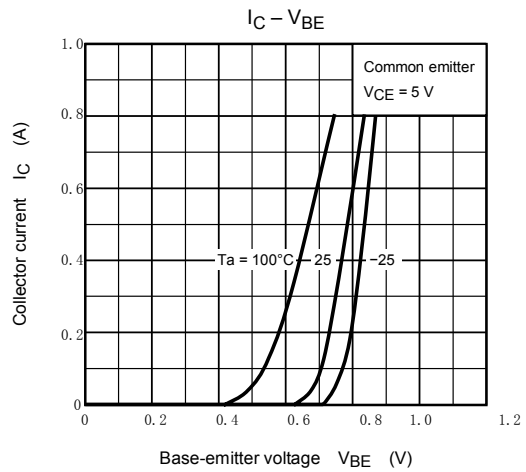
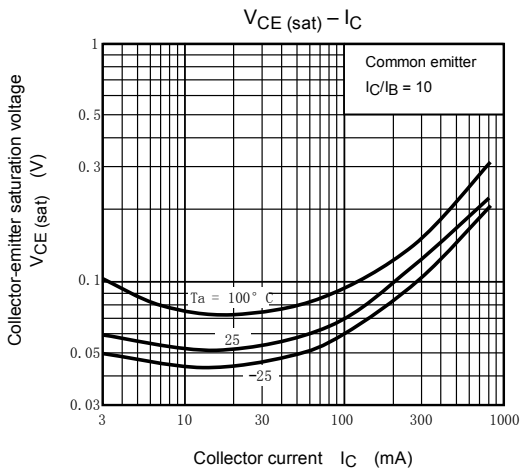
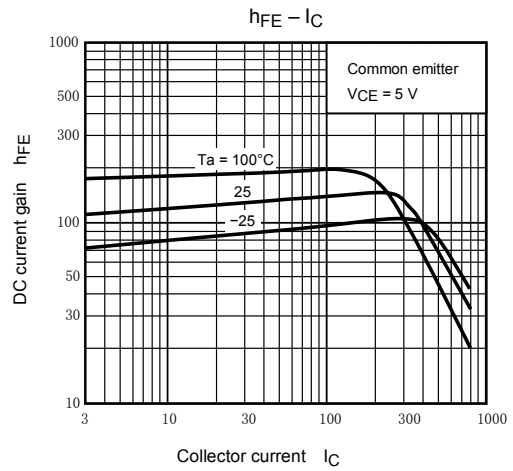
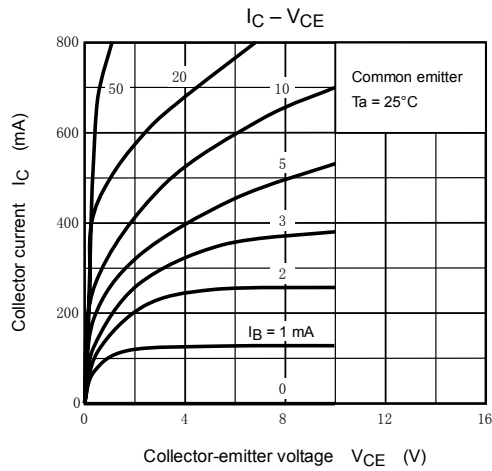
Electrical Characteristics (Ta=25°C)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V _{CB0}	I _C = 100uA, I _E = 0	120			V
Collector- emitter breakdown voltage	V _{CEO}	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

h_{FE} Classification

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

Typical Characteristics



Ordering information

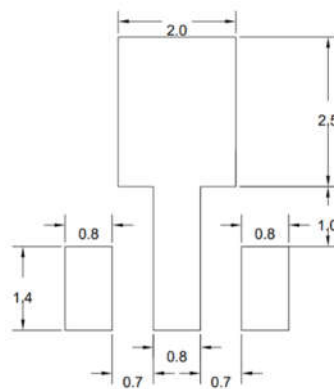
Package	Packing Description	Base Quantity	Packing Quantity
SOT-89	Tape/Reel,7"reel	1000pcs/Reel	6000PCS/Box 30000PCS/Carton

Package Dimensions

SOT-89

Dim	Millimeter		Inches	
	Min.	Max.	Min.	Max.
A	1.40	1.60	0.055	0.063
b	0.32	0.52	0.013	0.020
b1	0.38	0.58	0.015	0.023
c	0.35	0.45	0.014	0.018
D	4.40	4.60	0.173	0.181
D1	1.45	1.65	0.057	0.065
D2	1.70	1.80	0.067	0.071
E	2.30	2.60	0.091	0.102
E1	3.95	4.25	0.156	0.167
E2	1.80	2.00	0.071	0.079
e	1.40	1.60	0.055	0.063
e1	2.80	3.20	0.110	0.126
L	0.90	1.20	0.035	0.047

The recommended mounting pad size



UNIT:MM

Disclaimer

The information presented in this document is for reference only. Guangdong Youfeng Microelectronics Co.,Ltd. reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise. The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of which would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), YFW or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale. This publication supersedes & replaces all information previously supplied. For additional information, please visit our website <https://www.yfwdiode.com>, or consult YFW sales office for further assistance.