Micro Commercial Components

Micro Commercial Components
20736 Marilla Street Chatsworth
CA 91311
Phone: (818) 701-4933
Fax: (818) 701-4939

2SC2881
2SC2881-O
2SC2881-Y

NPN Silicon Power Transistors

Features

- With SOT-89 package
- Power amplifier applications
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0

Maximum Ratings

Symbol	Rating	Rating	Unit
V_{CEO}	Collector-Emitter Voltage	120	V
V_{CBO}	Collector-Base Voltage	120	V
V_{EBO}	Emitter-Base Voltage	5.0	V
I_C	Collector Current	800	mA
I_B	Base Current	160	mA
P_C	Collector power dissipation	500 1000(Note 1)	mW
T_J	Junction Temperature	150	℃
T_{STG}	Storage Temperature	-55 to +150	℃

Note 1: Mounted on ceramic substrate (250mm^2 x 0.8t)

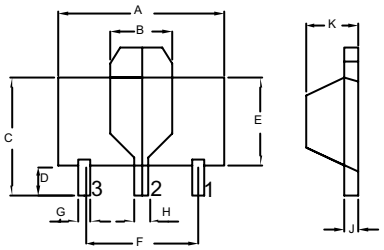
Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Typ.	Max	Units
OFF CHARACTERISTICS					
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage* (I_C=10mAdc, I_B=0)	120	---	---	Vdc
$V_{(BR)EBO}$	Collector-Emitter Breakdown Voltage* (I_E=1mAdc, I_C=0)	5	---		Vdc
I_{CBO}	Collector-Base Cutoff Current (V_{CB}=120Vdc,I_E=0)	---	---	0.1	uAdc
I_{EBO}	Emitter-Base Cutoff Current (V_{EB}=5.0Vdc, I_C=0)	---	---	0.1	uAdc
ON CHARACTERISTICS					
h_{FE}	Forward Current Transfer ratio (I_C=0.1Adc, V_{CE}=5.0Vdc)	80	---	240	---
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage (I_C=0.5Adc, I_B=50mAdc)	---	---	1.0	Vdc
V_{BE}	Base-Emitter Voltage (I_C=0.5Adc, V_{CE}=5.0Vdc)	---	---	1.0	Vdc
f_T	Transition Frequency (I_C=0.1Adc, V_{CE}=5.0Vdc)	---	120	---	MHz
C_{ob}	Collector Output Capacitance (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

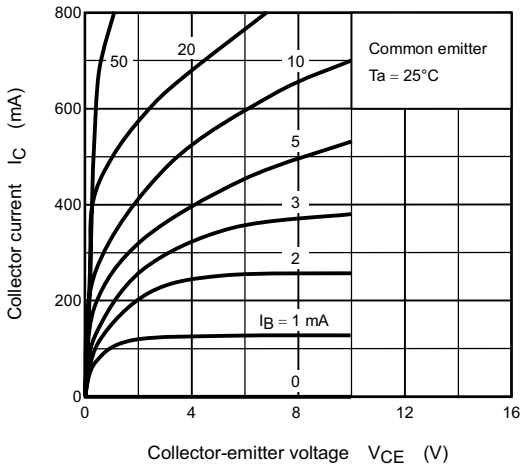
SOT-89



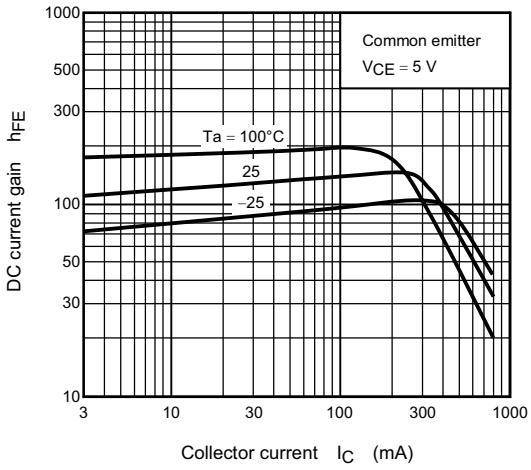
1.BASE
2.COLLECTOR
3.EMITTER

DIMENSINS					
DIM	INCHES		MM		NOTES
	MIN	MAX	MIN	MAX	
A	.173	.181	4.39	4.60	
B	.063	.071	1.60	1.80	
C	.154	.165	3.91	4.19	
D	.031	.039	0.80	1.00	
E	.092	.100	2.34	2.54	
F	.118	-----	3.00	-----	TYP
G	.013	.019	0.33	0.48	
H	.015	.021	0.38	0.53	
J	.015	.016	0.38	0.41	
K	.055	.063	1.40	1.60	

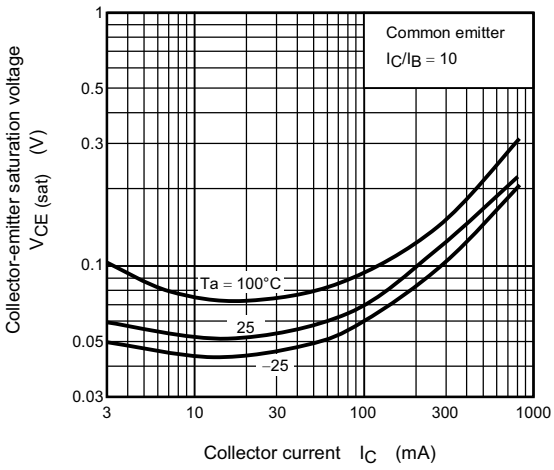
$I_C - V_{CE}$



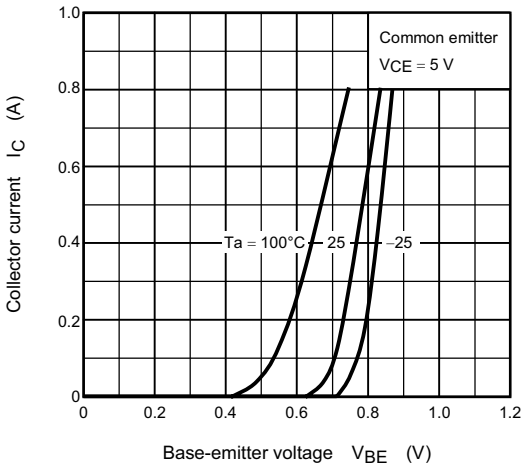
$h_{FE} - I_C$



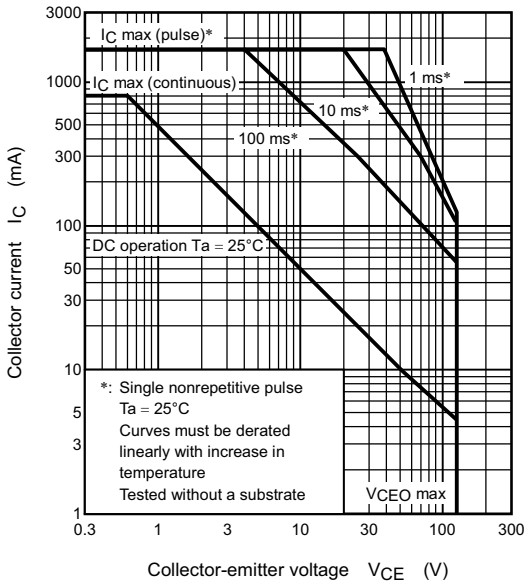
$V_{CE\ (sat)} - I_C$



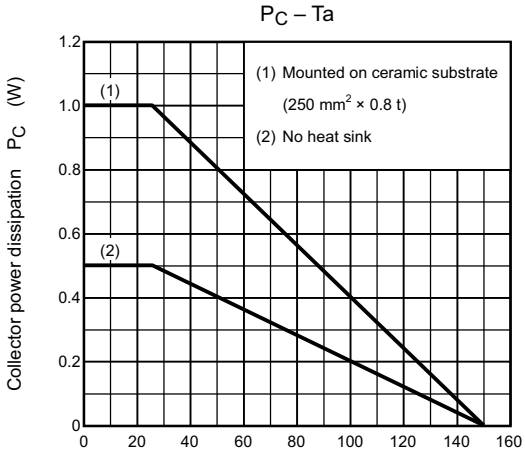
$I_C - V_{BE}$



Safe Operating Area



$P_C - Ta$



Micro Commercial Components

IMPORTANT NOTICE
Micro Commercial Components Corp . reserves the right to make changes without further notice to any product herein to make corrections, modifications , enhancements , improvements , or other changes . *Micro Commercial Components Corp* . does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights ,nor the rights of others . The user of products in such applications shall assume all risks of such use and will agree to hold *Micro Commercial Components Corp* . and all the companies whose products are represented on our website, harmless against all damages.
APPLICATIONS DISCLAIMER
Products offer by *Micro Commercial Components Corp* . are not intended for use in Medical, Aerospace or Military Applications.