



Micro Commercial Components

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

## 2SD1898

### NPN Silicon Power Transistors

### Features

- High  $V_{CEO}$ ,  $V_{CEO}=80V$
- High  $I_C$ ,  $I_C=1.0A(DC)$
- Good  $h_{FE}$  linearity
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL Rating 1
- Marking:DF

### Maximum Ratings

Symbol	Rating	Value	Unit
$V_{CEO}$	Collector-Emmitter Voltage	100	V
$V_{CBO}$	Collector-Base Voltage	80	V
$V_{EBO}$	Emitter-Base Voltage	5.0	V
$I_C$	Collector Current, DC	1.0	A
	Pulse <sup>(1)</sup>	2.0	A
$P_C$	Collector Power Dissipation <sup>(2)</sup>	0.5	W
		2.0	W
$T_J$	Junction Temperature	-55 to +150	°C
$T_{STG}$	Storage Temperature	-55 to +150	°C

### Electrical Characteristics @ 25°C Unless Otherwise Specified

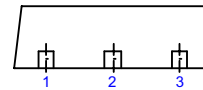
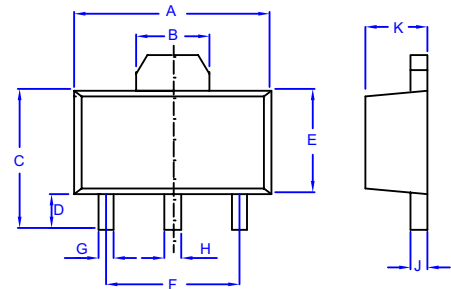
Symbol	Parameter	Min	Typ	Max	Units
--------	-----------	-----	-----	-----	-------

#### OFF CHARACTERISTICS

$V_{CEO}$	Collector-Emmitter Breakdown Voltage ( $I_C=1.0mA$ )	80	---	---	Vdc
$V_{CBO}$	Collector-Base Breakdown Voltage ( $I_C=50\mu A$ )	100	---	---	Vdc
$V_{EBO}$	Emitter-Base Breakdown Voltage ( $I_E=50\mu A$ )	5.0	---	---	Vdc
$I_{CBO}$	Collector Cutoff Current ( $V_{CB}=80Vdc$ )	---	---	1.0	$\mu A$
$I_{EBO}$	Emitter Cutoff Current ( $V_{EB}=4.0Vdc$ , $I_C=0$ )	---	---	1.0	$\mu A$
$h_{FE}$	DC Current Transfer Ratio <sup>(3)</sup> ( $V_{CE}=3.0Vdc$ , $I_C=0.5mA$ )	82	---	390	---
$V_{CE(sat)}$	Collector-Emmitter Saturation Voltage ( $I_C/I_E=50mA/20mA$ )	---	0.15	0.4	Vdc
$f_T$	Transition Frequency ( $V_{CE}=10Vdc$ , $I_C=50mA$ , $f=100MHz$ )	---	100	---	MHz
$C_{bb}$	Output Capacitance ( $V_{CB}=10Vdc$ , $I_C=0$ , $f=1.0MHz$ )	---	20	---	pF

- (1)  $P_w=20ms$ ,  $duty=1/2$
- (2) When mounted on a 40x40x0.7mm ceramic board.
- (3) Measured using pulse current

### SOT-89



1. OUT
2. GND
3. IN

DIM	DIMENSIONS				NOTES
	INCHES		MM		
	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	



Micro Commercial Components

## Ordering Information

Device	Packing
(Part Number)-TP	Tape&Reel;1Kpcs/Reel

**\*\*\*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.