



Micro Commercial Components  
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## 2SA1306

### NPN Silicon Power Transistors

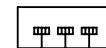
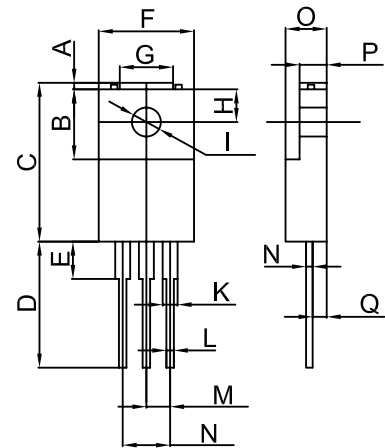
#### Features

- With TO-220Fa package
- Vertical output applications

#### Maximum Ratings

Symbol	Rating	Rating	Unit
$V_{CEO}$	Collector-Emitter Voltage	160	V
$V_{CBO}$	Collector-Base Voltage	160	V
$V_{EBO}$	Emitter-Base Voltage	5.0	V
$I_C$	Collector Current	1.5	A
$P_C$	Collector power dissipation	20	W
$T_J$	Junction Temperature	-55 to +150	$^{\circ}C$
$T_{STG}$	Storage Temperature	-55 to +150	$^{\circ}C$

#### TO-220Fa



1 2 3

#### Electrical Characteristics @ 25 $^{\circ}C$ Unless Otherwise Specified

Symbol	Parameter	Min	Max	Units
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#### OFF CHARACTERISTICS

$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage ( $I_C=50mA$ , $I_B=0$ )	160	---	Vdc
$I_{CBO}$	Collector-Base Cutoff Current ( $V_{CB}=160Vdc$ , $I_E=0$ )	---	1.0	$\mu A$
$I_{EBO}$	Emitter-Base Cutoff Current ( $V_{EB}=5.0Vdc$ , $I_C=0$ )	---	1.0	$\mu A$

#### ON CHARACTERISTICS

$h_{FE}$	Forward Current Transfer ratio ( $I_C=0.1A$ , $V_{CE}=5.0Vdc$ )	70	240	---
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage ( $I_C=0.5A$ , $I_B=0.05A$ )	---	1.5	Vdc

DIM	DIMENSIONS				NOTE
	INCHES		MM		
A	.02	.03	.60	.80	
B	.29	.30	7.30	7.70	
C	---	.67	---	17.00	
D	.53	---	13.50	---	
E	---	.16	---	4.0	
G	---	.40	---	10.20	
H	---	.22	---	5.70	
I	.16	.17	4.00	4.40	
J	.12	.13	3.00	3.20	∅
K	---	.06	---	1.50	
L	.03	.04	.70	.90	
M	2.84	.11	2.24	2.84	
N	.18	.22	4.58	5.58	
O	---	.17	---	4.40	
P	---	.11	---	2.90	
Q	---	.02	---	.50	
R	---	.06	---	1.50	