



Micro Commercial Components
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2N6308

NPN Silicon Power Transistors

Features

- For switching power supply applications
- 700V collector-base breakdown capability
- Excellent Dynamic saturation characteristics

Maximum Ratings

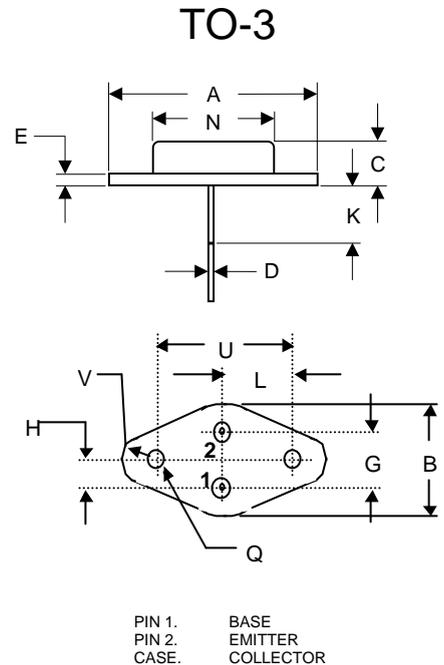
Symbol	Rating	Rating	Unit
V_{CEO}	Collector-Emitter Voltage	380	V
V_{CBO}	Collector-Base Voltage	700	V
V_{EBO}	Emitter-Base Voltage	10	V
I_{CP}	Peak Collector Current	16	A
I_C	Collector Current	8.0	A
P_C	Collector power dissipation	140	W
T_J	Junction Temperature	-55 to +150	°C
T_{STG}	Storage Temperature	-55 to +150	°C

Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Max	Units
OFF CHARACTERISTICS				
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage* ($I_C=10mA_{dc}$, $I_B=0$)	380	---	Vdc
V_{EBO}	Emitter-base breakdown voltage ($I_E=1.0mA_{dc}$, $I_C=0$)	10	---	Vdc
I_{CBO}	Collector-Base Cutoff Current ($V_{CB}=700V_{dc}$, $I_E=0$)	---	100	μA_{dc}
I_{EBO}	Emitter-Base Cutoff Current ($V_{EB}=10V_{dc}$, $I_C=0$)	---	10	μA_{dc}

ON CHARACTERISTICS

h_{FE}	Forward Current Transfer ratio ($I_C=8.0A_{dc}$, $V_{CE}=5.0V_{dc}$)	5.0	20	---
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage ($I_C=5.0A_{dc}$, $I_B=1.0A_{dc}$)	---	1.0	Vdc
$V_{BE(sat)}$	Base-Emitter Saturation Voltage ($I_C=5.0A_{dc}$, $I_B=1.0A_{dc}$)	---	1.5	Vdc
t_F	Full time ($V_{CE}=300V_{dc}$, $I_C=5.0A_{dc}$, $I_{B1}=1.0A_{dc}$, $V_{BE(off)}=5.0V_{dc}$)	---	125	nS
T_S	Turn-off storage time ($V_{CE}=300V_{dc}$, $I_C=5.0A_{dc}$, $I_{B1}=1.0A_{dc}$, $V_{BE(off)}=5.0V_{dc}$)	---	2300	nS



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	1.550	REF	39.37	REF	
B	----	1.050	----	26.67	
C	.250	.335	6.35	8.51	
D	.038	.043	0.97	1.09	
E	0.55	0.70	1.40	1.77	
G	.430	BSC	10.92	BSC	
H	.215	BSC	5.46	BSC	
K	.440	.480	11.18	12.19	
L	.665	BSC	16.89	BSC	
N	----	.830	----	21.08	
Q	.151	.165	3.84	4.19	∅
U	1.187	BSC	30.15	BSC	
V	.131	.188	3.33	4.77	