



Micro Commercial Components

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MJ423

Features

- With TO-3 package
- For medium-to-high voltage inverters ,converters, regulators and switching circuits

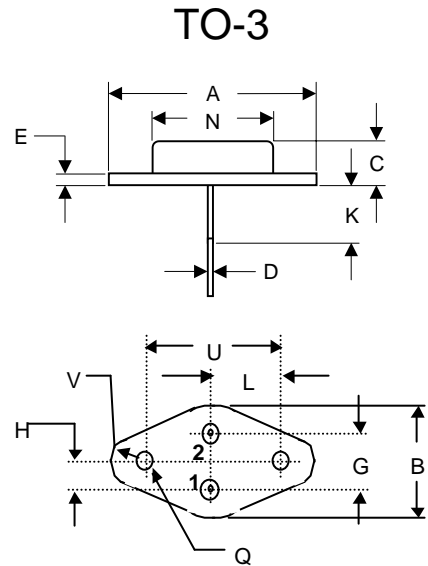
Silicon NPN Transistor

Maximum Ratings

Symbol	Rating	Rating	Unit
V_{CE0}	Collector-Emitter Voltage	400	V
V_{CB0}	Collector-Base Voltage	325	V
V_{EB0}	Emitter-Base Voltage	5.0	V
I_B	Base Current	2.0	A
I_C	Collector Current	10	A
P_D	Collector power dissipation	125	W
T_J	Junction Temperature	200	°C
T_{STG}	Storage Temperature	-65 to +200	°C

Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Max	Units
V_{CE0}	Collector-Emitter Sustaining Voltage ($I_C=100\text{mA}$, $I_B=0$)	325	---	Vdc
I_{CBO}	Collector-Base Cutoff Current ($V_{CB}=400\text{Vdc}$, $I_E=0$)	---	0.25	mA
I_{EBO}	Emitter-Base Cutoff Current ($V_{EB}=5.0\text{Vdc}$, $I_C=0$)	---	5.0	mA
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage ($I_C=1\text{A}$, $I_B=0.1\text{A}$)	---	0.8	Vdc
$V_{BE(sat)}$	Base-Emitter Saturation Voltage ($I_C=1\text{A}$, $I_B=0.1\text{A}$)	---	1.25	Vdc
h_{FE}	Forward Current Transfer ratio ($I_C=1\text{A}$, $V_{CE}=5\text{Vdc}$) ($I_C=2.5\text{A}$, $V_{CE}=5\text{Vdc}$)	30 10	90	---
f_T	Transition Frequency ($V_{CE}=10\text{Vdc}$, $I_C=0.2\text{A}$)	2.5	---	MHz



PIN 1. BASE
 PIN 2. EMITTER
 CASE. COLLECTOR

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	