



Micro Commercial Components

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2N5321

Features

- $V_{CE0}=50V$
- $I_{CM}=2A$
- $P_{tot}=1.0W$ ($T_{amb}=25^{\circ}C$)
- $R_{th(jc)max}=17.5^{\circ}C/W$, $R_{th(ja)max} = 175^{\circ}C/W$
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates RoHS Compliant. See ordering information)

Maximum Ratings

Symbol	Rating	Rating	Unit
V_{CE0}	Collector-Emitter Voltage ($I_B=0$)	50	V
V_{CBO}	Collector-Base Voltage ($I_E=0$)	75	V
V_{EBO}	Emitter-Base Voltage ($I_C=0$)	5.0	V
V_{CEV}	Collector-Emitter Voltage ($V_{BE}=1.5V$)	75	V
I_C	Collector Current	1200	mA
T_J	Operating Junction Temperature	-65 to +200	$^{\circ}C$
T_{STG}	Storage Temperature	-65 to +200	$^{\circ}C$

Electrical Characteristics @25°C Unless Otherwise Specified

Symbol	Parameter	Min	Max	Units
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OFF CHARACTERISTICS

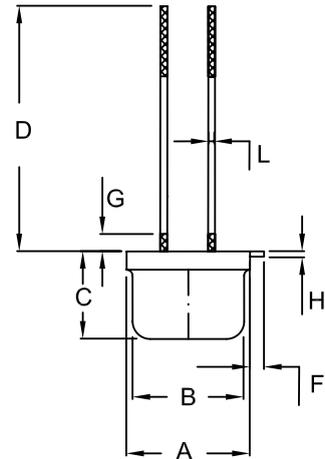
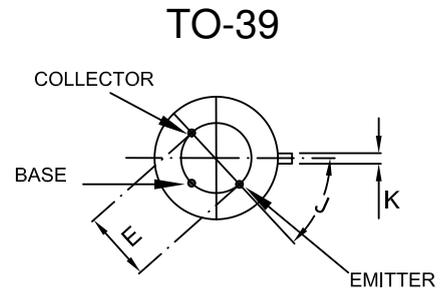
$V_{(BR)CEO}^*$	Collector-Emitter Breakdown Voltage ($I_C=10mA$, $I_B=0$)	50	---	V
$V_{(BR)CEV}$	Collector-Emitter Breakdown Voltage ($I_C=0.1mA$, $V_{BE}=1.5V$)	75	---	V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage ($I_E=0.1mA$, $I_C=0$)	5.0	---	V
$V_{BE(Notes 2)}$	Base-Emitter Voltage ($I_C=500mA$, $V_{CE}=4V$)	---	1.4	V
I_{CBO}	Collector-Base Cut-off Current ($V_{CB}=60V$, $I_E=0$)	---	5.0	μA
I_{EBO}	Emitter-Base Cut-off Current ($V_{EB}=4.0V$, $I_C=0$)	---	0.5TYP	μA

ON CHARACTERISTICS

h_{FE}^*	DC CURRENT GAIN ($I_C=0.5A$, $V_{CE}=4V$)	40	250	---
$V_{CE(sat)}^*$	Collector-Emitter Saturation Voltage ($I_C=500mA$, $I_B=50mA$)	---	0.8	V
f_T	Transition Frequency ($V_{CE}=4V$, $I_C=0.05A$, $f=10MHz$)	50	---	MHz
T_{ON}	Turn-On Time ($I_C=500mA$, $V_{CC}=30V$, $I_{B1}=50mA$)		80	ns
T_{OFF}	Turn-Off Time ($I_C=500mA$, $V_{CC}=30V$, $I_{B1}=-I_{B2}=50mA$)		800	ns

Notes: 1. High Temperature Solder Exemption Applied, see EU Directive Annex 7.
2. Pulsed: Pulse duration = 300us, duty cycle = 1 %

Medium Power Silicon NPN Planar Transistor



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.335	.370	8.509	9.40	Φ
B	-----	.334	-----	8.50	Φ
C	-----	.260	-----	6.60	
D	.50	-----	12.7	-----	
E	.200		5.08		Φ TYP
F	.029	.045	7.366	11.43	
G	-----	.050	-----	1.27	
H	.009	.031	0.229	7.874	
J	44°	46°	44°	46°	
K	.028	.034	0.711	0.864	
L	.016	.021	0.406	0.533	



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Ordering Information :

Device	Packing
Part Number-BP	Bulk; 50 pcs/Box

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