



Micro Commercial Components



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# 2N5323

## Features

- 10 Watts Power Dissipation.
- Metal can case.
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates RoHS Compliant. See ordering information)

## Maximum Ratings

Symbol	Rating	Rating	Unit
$V_{CEO}$	Collector-Emitter Voltage	50	V
$V_{CBO}$	Collector-Base Voltage	75	V
$V_{EBO}$	Emitter-Base Voltage	5.0	V
$I_C$	Collector Current, Continuous	2.0	A
$I_B$	Base Current	1.0	A
$T_J$	Operating Junction Temperature	-55 to +150	°C
$T_{STG}$	Storage Temperature	-55 to +150	°C

## Thermal Characteristics

Symbol	Rating	Max	Unit
$P_D$	Total Device Dissipation Derate above 25°C	10 0.057	W mW/°C
$R_{JC}$	Thermal Resistance, Junction to Case	17.5	°C/W

## 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 ( $I_C=100\text{mA}$ , $I_B=0$ )	50	---	Vdc
$I_{CEX}$	Collector Cutoff Current ( $V_{CE}=75\text{Vdc}$ , $V_{EB(off)}=1.5\text{Vdc}$ ( $V_{CE}=45\text{Vdc}$ , $V_{EB(off)}=1.5\text{Vdc}$ , $T_C=150^\circ\text{C}$ )	---	0.1 5.0	mA
$I_{EBO}$	Emitter Cutoff Current ( $V_{EB}=5.0\text{Vdc}$ , $I_C=0$ )	---	0.1	mA

### ON CHARACTERISTICS

$h_{FE}$	DC Current Gain <sup>(1)</sup> ( $V_{CE}=4.0\text{Vdc}$ , $I_C=500\text{mA}$ )	40	250	---
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage <sup>(1)</sup> ( $I_C=500\text{mA}$ , $I_B=50\text{mA}$ )	---	1.2	Vdc
$V_{BE(on)}$	Base-Emitter On Voltage ( $I_C=500\text{mA}$ , $V_{CE}=4.0\text{Vdc}$ )	---	1.4	Vdc

### SMALL-SIGNAL CHARACTERISTICS

$h_{fe}$	Small-signal current gain ( $V_{CE}=4.0\text{Vdc}$ , $I_C=50\text{mA}$ , $f=10\text{MHz}$ )	5.0	---	---
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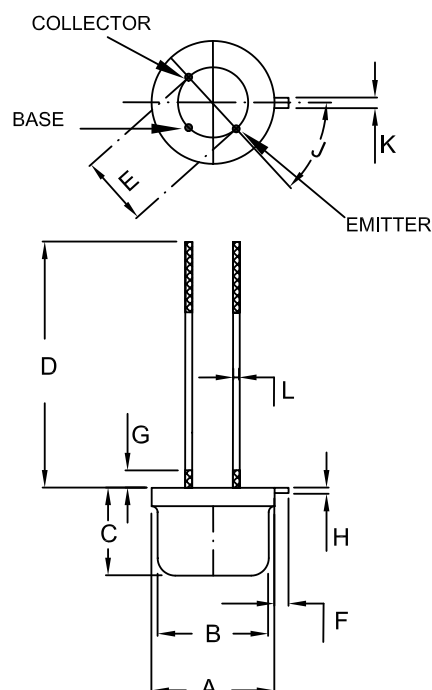
### SWITCHING CHARACTERISTICS

$t_{on}$	Turn-On Time ( $V_{CC}=30\text{Vdc}$ , $I_C=500\text{mA}$ , $I_{B1}=50\text{mA}$ )	---	100	ns
$t_{off}$	Turn-Off Time ( $V_{CC}=30\text{Vdc}$ , $I_C=500\text{mA}$ , $I_{B1}=I_{B2}=50\text{mA}$ )	---	1000	ns

Notes:1.High Temperature Solder Exemption Applied, see EU Directive Annex 7.

## PNP Silicon Switching Transistor

### TO-39



### DIMENSIONS

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.335	.370	8.509	9.40	Φ
B	.305	.335	7.747	8.509	Φ
C	.240	.260	6.096	6.604	
D	.50	.75	12.7	19.05	
E	.200		5.08		ΦTYP
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	

Ordering Information :

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

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