



Micro Commercial Components

Micro Commercial Components
20736 Marilla Street Chatsworth
CA 91311
Phone: (818) 701-4933
Fax: (818) 701-4939

2N2905A

Features

- General-purpose Transistor for Switching and Amplifier Applications
- Housed in a TO-39 Case
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates RoHS Compliant. See ordering information)

PNP General Purpose Amplifier

Maximum Ratings

Symbol	Rating	Rating	Unit
V_{CE0}	Collector-Emitter Voltage	60	V
V_{CB0}	Collector-Base Voltage	60	V
V_{EB0}	Emitter-Base Voltage	5.0	V
I_C	Collector Current, Continuous	600	mA
T_J	Operating Junction Temperature	-55 to +150	°C
T_{STG}	Storage Temperature	-55 to +150	°C

Electrical Characteristics @ 25°C Unless Otherwise Specified

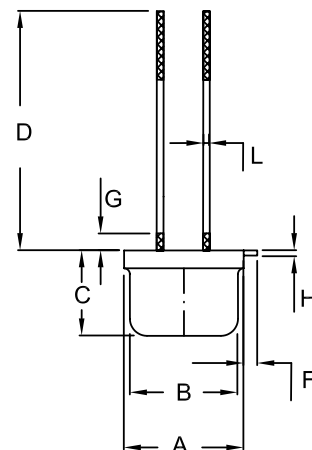
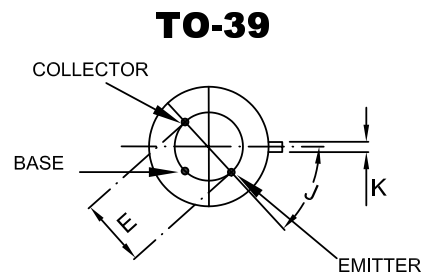
Symbol	Parameter	Min	Typ	Max	Units
--------	-----------	-----	-----	-----	-------

OFF CHARACTERISTICS

$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage* ($I_C=10\text{mA}$, $I_B=0$)	60	70	---	Vdc
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage ($I_C=10\text{mA}$, $I_E=0$)	60	100	---	Vdc
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage ($I_E=10\text{mA}$, $I_C=0$)	5.0	9.0	---	Vdc
I_{CES}	Collector-Emitter Cutoff Current ($V_{CE}=30\text{Vdc}$)	---	1.0	50	nA
I_{CBO}	Collector-Base Cutoff Current ($V_{CB}=50\text{Vdc}$)	---	0.25	10	nA
I_{EBO}	Emitter-Base Cutoff Current ($V_{EB}=3.5\text{Vdc}$)	---	0.1	50	nA

ON CHARACTERISTICS

h_{FE}	DC Current Gain* ($I_C=100\mu\text{A}$, $V_{CE}=10\text{Vdc}$) ($I_C=1.0\text{mA}$, $V_{CE}=10\text{Vdc}$) ($I_C=10\text{mA}$, $V_{CE}=10\text{Vdc}$) ($I_C=150\text{mA}$, $V_{CE}10\text{Vdc}$) ($I_C=500\text{mA}$, $V_{CE}=10\text{Vdc}$)	75 100 100 100 50	225 250 ---	450 ---	---
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage ($I_C=150\text{mA}$, $I_B=15\text{mA}$) ($I_C=500\text{mA}$, $I_B=50\text{mA}$)	---	0.18 0.5	0.4 1.6	Vdc
$V_{BE(sat)}$	Base-Emitter Saturation Voltage ($I_C=150\text{mA}$, $I_B=15\text{mA}$) ($I_C=500\text{mA}$, $I_B=50\text{mA}$)	---	0.87 1.0	1.3 2.6	Vdc



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	

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

2N2905A



Symbol	Parameter	Min	Typ	Max	Units
SMALL-SIGNAL CHARACTERISTICS					
AC h_{FE}	Short Circuit Current Transfer Ratio ($I_C=1.0mA$, $V_{CE}=10V$, $f=1.0kHz$)	100	250	---	---
C_{OBO}	Open Circuit Output Capacitance ($V_{CB}=10V$, $I_E=0$, $100kHz < f < 1.0MHz$)	---	6.0	8.0	pF
C_{IBO}	Input Capacitance, Output Open Circuited ($V_{EB}=2.0V$, $I_C=0$, $100kHz < f < 1.0MHz$)	---	8.0	30.0	pF
SWITCHING CHARACTERISTICS					
t_{ON}	Saturated Turn On Switching Time to 90% 16V, 50 ohm input pulse	---	25	45	ns
t_{OFF}	Saturated Turn Off Switching Time to 10% 16V, 50 ohm input pulse	---	200	300	ns



Micro Commercial Components

Ordering Information

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

*****IMPORTANT NOTICE*****

Micro Commercial Components Corp. reserves the right to make changes without further notice to any product herein to make corrections, modifications, enhancements, improvements, or other changes. *Micro Commercial Components Corp.* does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights, nor the rights of others. The user of products in such applications shall assume all risks of such use and will agree to hold *Micro Commercial Components Corp.* and all the companies whose products are represented on our website, harmless against all damages.

*****APPLICATIONS DISCLAIMER*****

Products offer by *Micro Commercial Components Corp.* are not intended for use in Medical, Aerospace or Military Applications.