Obsolete

·M·C·C·™

Micro Commercial Components

RoHS COMPLIANT

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

2N2907
2N2907A

PNP Switching Transistors

Features

- High current (max.600mA)
- Low voltage (max.60V)
- 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 2N2907 2N2907A	 40 60	V
V_{CBO}	Collector-Base Voltage	60	V
V_{EBO}	Emitter-Base Voltage	5.0	V
I_C	Collector Current (DC)	600	mA
I_{CM}	Peak Collector Current	800	mA
I_{BM}	Peak Base Current	200	mA
T_J	Operating Junction Temperature	-55 to +150	°C
T_{STG}	Storage Temperature	-55 to +150	°C

Thermal Characteristics

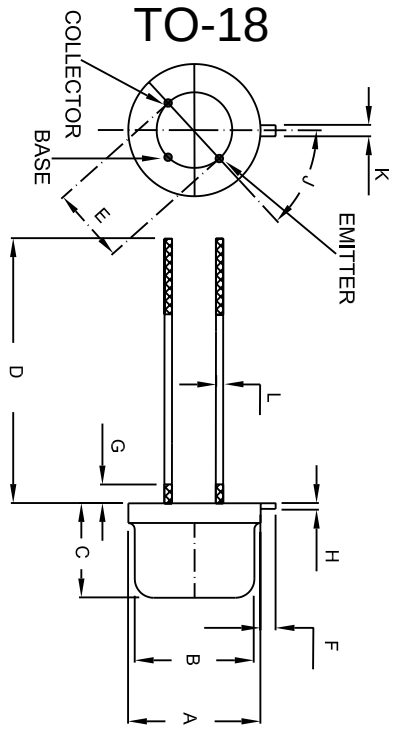
Symbol	Rating	Max	Unit
P_{tot}	Total power Dissipation $T_A \leqq 25℃$ $T_C \leqq 25℃$	 400 1.2	 mW W
R_{JC}	Thermal Resistance, Junction to Case	146	K/W
R_{JA}	Thermal Resistance, Junction to Ambient	350	K/W

Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter		Min	Max	Units
OFF CHARACTERISTICS					
I_{CBO}	Collector cut-off current (V_{CB}=50Vdc, I_E=0) (V_{CB}=50Vdc, I_E=0,T_A=150℃) (V_{CB}=50Vdc, I_E=0) (V_{CB}=50Vdc, I_E=0,T_A=150℃)	2N2907 2N2907A 	 --- --- --- ---	 20 20 10 10	 nAdc μAdc nAdc μAdc
I_{EBO}	Emitter Cut-off current (I_C=0, V_{EB}=5.0Vdc)		---	50	nAdc
h_{FE}	DC Current Gain (I_C=0.1mAdc, V_{CE}=10Vdc) (I_C=1.0mAdc, V_{CE}=10Vdc) (I_C=10mAdc, V_{CE}=10Vdc) (I_C=150mAdc, V_{CE}=10Vdc)* (I_C=500mAdc, V_{CE}=10Vdc)*	2N2907	 35 50 75 100 30	 300	
h_{FE}	DC Current Gain (I_C=0.1mAdc, V_{CE}=10Vdc) (I_C=1.0mAdc, V_{CE}=10Vdc) (I_C=10mAdc, V_{CE}=10Vdc) (I_C=150mAdc, V_{CE}=10Vdc)* (I_C=500mAdc, V_{CE}=10Vdc)*	2N2907A	 75 100 100 100 50	 300	

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

TO-18



DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
A	.209	.230	5.309	5.842	Φ
B	.178	.195	4.521	4.953	Φ
C	.170	.210	4.318	5.334	
D	.50	.75	12.7	19.05	
E	.100		2.54		ΦTYP
F	.028	.048	7.112	1.219	
G	-----	.050	-----	1.27	
H	.009	.031	0.229	0.787	
J	44°	46°	44°	46°	
K	.036	.046	0.914	1.168	
L	.016	.021	0.406	0.533	

Symbol	Parameter		Min	Max	Units
ON CHARACTERISTICS*					
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage* (I_C=150mAdc, I_B=15mAdc) (I_C=500mAdc, I_B=50mAdc)		 --- ---	 400 1.6	 mVdc Vdc
$V_{BE(sat)}$	Base-Emitter Saturation Voltage * (I_C=150mAdc, I_B=15mAdc) (I_C=500mAdc, I_B=50mAdc)		 --- ---	 1.3 2.6	 Vdc Vdc
SMALL-SIGNAL CHARACTERISTICS					
C_{OB}	Output Capacitance (V_{CB}=10Vdc,I_E=ie=0, f=1.0MHz)		 ---	 8.0	 pF
f_T	Transistor Frequency* (I_C=50mAdc, V_{CE}=20Vdc, f=100MHz)		 200	 ---	 MHz
SWITCHING CHARACTERISTICS					
T_d	Delay Time	I_{CON}=150mAdc, I_{BON}=15mAdc, $I_{B(off)}$=15mAdc	---	15	ns
t_r	Rise Time		---	35	ns
t_s	Storage Time		---	250	ns
t_f	Fall Time		---	50	ns

* Pulse Test: tp≦300us, Duty Cycle≦2.0%

Ordering Information :

Device	Packing
Part Number-BP	Bulk;100pcs/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.
LIFE SUPPORT
MCC's products are not authorized for use as critical components in life support devices or systems without the express written approval of Micro Commercial Components Corporation.
CUSTOMER AWARENESS
Counterfeiting of semiconductor parts is a growing problem in the industry. Micro Commercial Components (MCC) is taking strong measures to protect ourselves and our customers from the proliferation of counterfeit parts. MCC strongly encourages customers to purchase MCC parts either directly from MCC or from Authorized MCC Distributors who are listed by country on our web page cited below. Products customers buy either from MCC directly or from Authorized MCC Distributors are genuine parts, have full traceability, meet MCC's quality standards for handling and storage. **MCC will not provide any warranty coverage or other assistance for parts bought from Unauthorized Sources.** MCC is committed to combat this global problem and encourage our customers to do their part in stopping this practice by buying direct or from authorized distributors.