







Micro Commercial Components 20736 Marilla Street Chatsworth CA 91311

Phone: (818) 701-4933 (818) 701-4939 Fax:

2N5321

Features

- $V_{CEO}=50V$
- $I_{CM}=2A$
- Ptot=1.0W (Tamb=25 °C)
- Rth(jc)max=17.5°C/W, Rth(ja)max = 175°C/W Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates RoHS Compliant. See ordering information)
 Maximum Ratings

	<u>_</u>			
Symbol	Rating	Rating	Unit	
V_{CEO}	Collector-Emitter Voltage(IB=0)	50	V	
V_{CBO}	Collector-Base Voltage(I∈=0)	75	V	
V_{EBO}	Emitter-Base Voltage(Ic=0)	5.0	V	
Vcev	Collector-Emitter Voltage(VBE=1.5v)	75	V	
l _c	Collector Current	1200	mA	
T_J	Operating Junction Temperature	-65 to +200	°C	
T _{STG}	Storage Temperature	-65 to +200	°C	

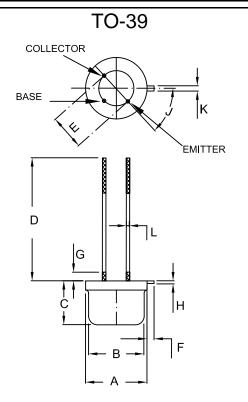
Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Max	Units
OFF CHARAC	CTERISTICS			
V(BR)CEO*	Collector-Emitter Breakdown Voltage (⊱=10mA, I _B =0)	50		V
$V_{(BR)CEV}$	Collector-Emitter Breakdown Voltage (b=0.1mA, VBE=1.5V))	75		V
V (BR)EBO	Emitter-Base Breakdown Voltage (ξ =0.1mA, ξ =0)	5.0		V
V _{BE(Note 2)}	Base-Emitter Voltage (b=500mA, Vce=4V)		1.4	V
Ісво	Collector-Base Cut-off Current $(V_{CB}=60V, I_{E}=0)$		5.0	μΑ
I _{EBO}	Emitter-Base Cut-off Current $(V_{EB}=4.0V, \xi=0)$		0.5TYP	μA
ON CHARACTERISTICS				

UN CHARACTERISTICS				
h _{FE*}	DC CURRENT GAIN $(b=0.5A, V_{CE}=4V)$	40	250	
$V_{CE(sat)^*}$	Collector-Emitter Saturation Voltage (b=500mA, l₀=50mA)		0.8	V
f _T	Transistion Frequency (V _{CE} =4V, ½=0.05A, f=10MH ₇)	50		MHz
Ton	Turn-On Time (Ic=500mA Vcc=30V IB1=50mA)		80	ns
Toff	Turn-Off Time (Ic=500mA Vcc=30V Ib1=-Ib2=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**



	DIMENSIONS				
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
Α	.335	.370	8.509	9.40	Ф
В		.334		8.50	Ф
С		.260		6.60	
D	.50		12.7		
Е	.20	00	5.0	08	ФТҮР
F	.029	.045	7.366	11.43	
G		.050		1.27	
Н	.009	.031	0.229	7.874	
J	44°	46°	44°	46°	
K	.028	.034	0.711	0.864	
Ĺ	016	021	0.406	0.533	



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.

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.