# imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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**Micro Commercial Components** 



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

### **Features**

- Halogen free available upon request by adding suffix "-HF" Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates RoHS Compliant. See ordering information) The complementary NPN types are the TIP41 respectively
- Epoxy meets UL 94 V-0 flammability rating
- Moisure Sensitivity Level 1
- Marking : Part Number
- Mounting Torgue: 5 in-lbs Maximum

#### Absolute Maximum Ratings @ $T_a = 25^{\circ}$ (unless otherwise noted)

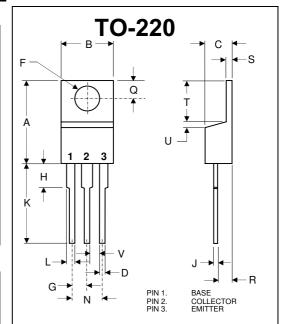
Symbol	Parameter	Value	Unit
V <sub>CBO</sub> TIP42 TIP42A TIP42B TIP42C	Collector-base voltage (Open emitter)	-40 -60 -80 -100	V
V <sub>CEO</sub> TIP42 TIP42A TIP42B TIP42C	Collector-emitter voltage (Open base)	-40 -60 -80 -100	V
V <sub>EBO</sub>	Emitter-base Voltage (Open collector)	-5	V
lc	Collector Current	-6	А
I <sub>CM</sub>	Collector Current Pulse	-10	А
I <sub>B</sub>	Base Current	-2	А
Pc	Total Device Dissipation(Ta=25°C)	-2	W
	Total Device Dissipation(Tc=25°C)	65	W
TJ	Junction Temperature	150	°C
T <sub>STG</sub>	Storage Temperature Range	-65 to +150	°C

#### Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Max	Units
V <sub>CEO(SUS)</sub> TIP42 TIP42A TIP42B TIP42C	Collector-emitter sustaining voltage ( $I_{C}$ =-30mA; $I_{B}$ =0)	-40 -60 -80 -100		V
V <sub>CE(sat)</sub>	Collector-emitter Saturation Voltage ( $I_C$ =-6A $I_B$ =-0.6A )	-1.5	V	
V <sub>BE</sub>	Base-emitter Voltage (I <sub>C</sub> =-6A;V <sub>CE</sub> =-4V)	-2.0	V	
I <sub>CES</sub> TIP42 TIP42A TIP42B TIP42C	Collector cut-off current (V <sub>CE</sub> =-40V; V <sub>EB</sub> =0) (V <sub>CE</sub> =-80V; V <sub>EB</sub> =0) (V <sub>CE</sub> =-80V; V <sub>EB</sub> =0) (V <sub>CE</sub> =-100V; V <sub>EB</sub> =0)	-0.4		mA
I <sub>CEO</sub> TIP42/42A TIP42B/C	Collector cut-off current ( $V_{CE}$ =-30V; $V_{EB}$ =0) ( $V_{CE}$ =-60V; $V_{EB}$ =0)	-0.7		mA
I <sub>EBO</sub>	Emitter cut-off current (V <sub>EB</sub> =-5V; I <sub>C</sub> =0)		-1.0	mA
h <sub>fe</sub>	DC current gain (I <sub>C</sub> =-0.3A ; V <sub>C</sub> ==-4V) (I <sub>C</sub> =-3A ; V <sub>C</sub> =-4V)	30 15	75	
f <sub>T</sub>	Transition frequency ( $I_{C}$ =-0.5A ; $V_{CE}$ =-10V)	3		MHZ

## Silicon PNP **Power Transistors**

TIP42/42A/42B/42C



	DIMENSIONS					
	INCHES		MM			
DIM	MIN	MAX	MIN	MAX	NOTE	
A	.560	.625	14.22	15.88		
В	.380	.420	9.65	10.67		
С	.140	.190	3.56	4.82		
D	.020	.045	0.51	1.14		
F	.139	.161	3.53	4.09	Ø	
G	.190	.110	2.29	2.79		
Н		.250		6.35		
J	.012	.025	0.30	0.64		
К	.500	.580	12.70	14.73		
L	.045	.060	1.14	1.52		
N	.190	.210	4.83	5.33		
Q	.100	.135	2.54	3.43		
R	.080	.115	2.04	2.92		
S	.045	.055	1.14	1.39		
Т	.230	.270	5.84	6.86		
U		.050		1.27		
V	.045		1.15			

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

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### **Ordering Information :**

Device	Packing
Part Number-BP	Bulk; 1 Kpcs/Box

Note : Adding "-HF" suffix for halogen free, eg. Part Number-BP-HF

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