



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!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





Micro Commercial Components



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

MMBT5401

PNP Plastic Encapsulate Transistor

Features

- Halogen free available upon request by adding suffix "-HF"
- Collector Current: $I_{CM}=0.6A$
- Collector-Base Voltage: $V_{(BR)CBO}=160V$
- Operating And Storage Temperatures $-55^{\circ}C$ to $150^{\circ}C$
- Capable of 0.3Watts of Power Dissipation
- Marking: 2L
- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

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 ($I_C=1.0mA$, $I_B=0$)	150	---	Vdc
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage ($I_C=100\mu A$, $I_E=0$)	160	---	Vdc
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage ($I_E=10\mu A$, $I_C=0$)	5.0	---	Vdc
I_{CBO}	Collector Cutoff Current ($V_{CB}=120Vdc$, $I_E=0$)	---	0.1	μA
I_{EBO}	Emitter Cutoff Current ($V_{EB}=4.0Vdc$, $I_C=0$)	---	0.1	μA

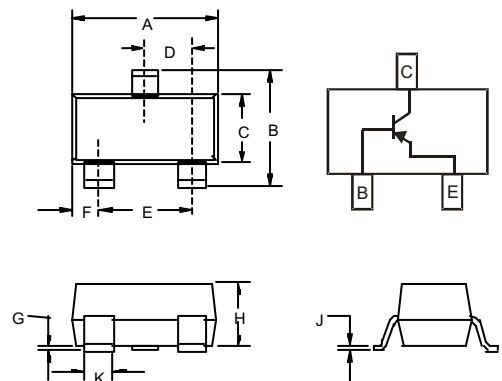
ON CHARACTERISTICS

h_{FE-1}	DC Current Gain ($V_{CE}=5.0Vdc$, $I_C=1.0mA$)	80	---	---
h_{FE-2}	DC Current Gain ($V_{CE}=5.0Vdc$, $I_C=10mA$)	100	200	---
h_{FE-3}	DC Current Gain ($V_{CE}=5.0Vdc$, $I_C=50mA$)	50	---	---
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage ($I_C=50mA$, $I_B=5.0mA$)	---	0.5	Vdc
$V_{BE(sat)}$	Base-Emitter Saturation Voltage ($I_C=50mA$, $I_B=5.0mA$)	---	1.0	Vdc

SMALL-SIGNAL CHARACTERISTICS

f_T	Current Gain-Bandwidth Product ($I_C=10mA$, $V_{CE}=5.0Vdc$, $f=30MHz$)	100	---	MHz
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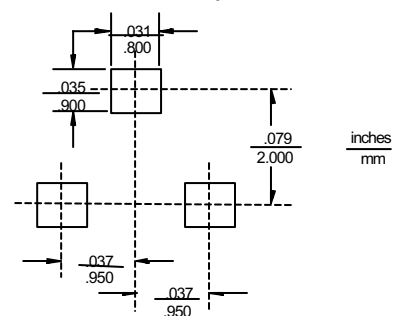
SOT-23



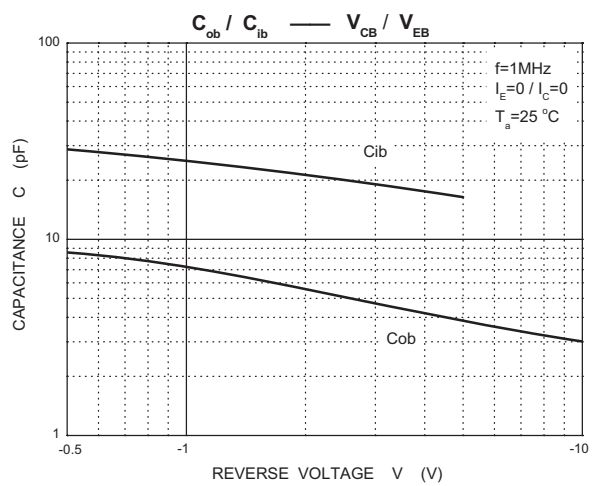
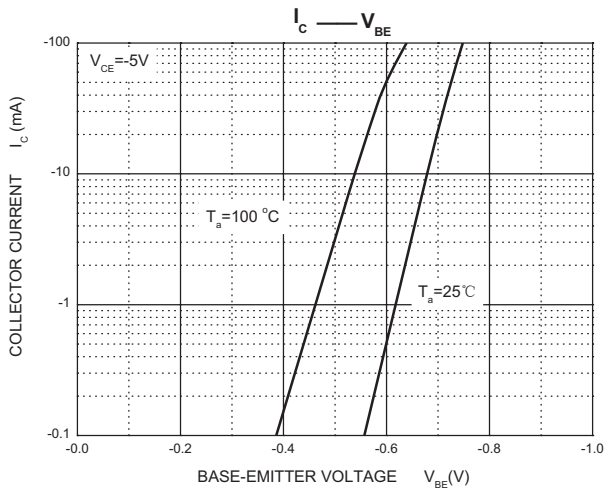
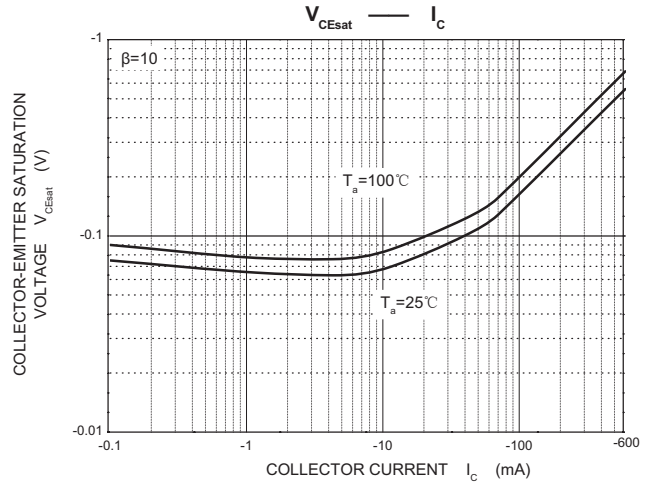
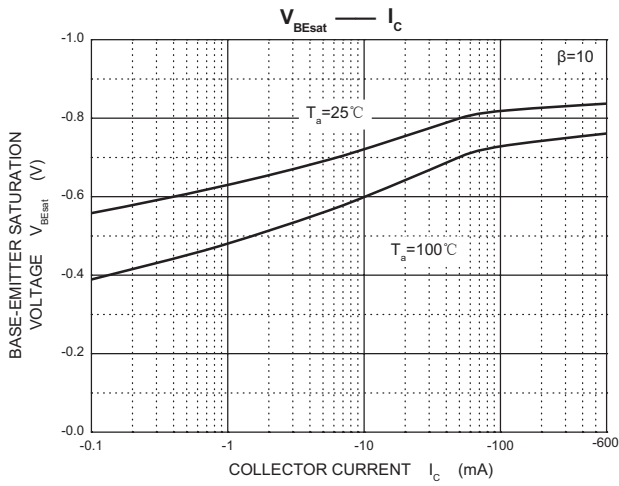
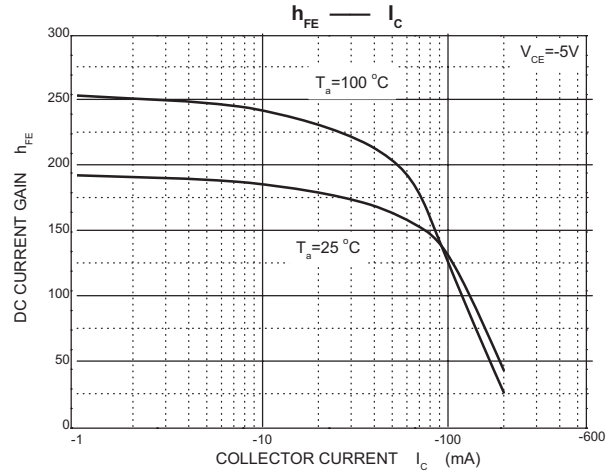
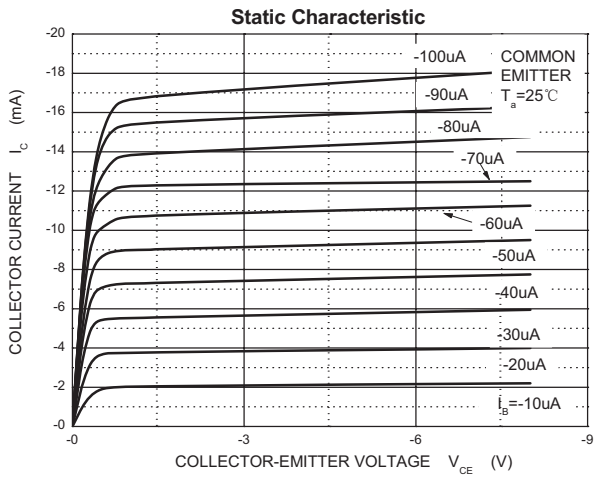
DIMENSIONS

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.110	.120	2.80	3.04	
B	.083	.104	2.10	2.64	
C	.047	.055	1.20	1.40	
D	.035	.041	.89	1.03	
E	.070	.081	1.78	2.05	
F	.018	.024	.45	.60	
G	.0005	.0039	.013	.100	
H	.035	.044	.89	1.12	
J	.003	.007	.085	.180	
K	.015	.020	.37	.51	

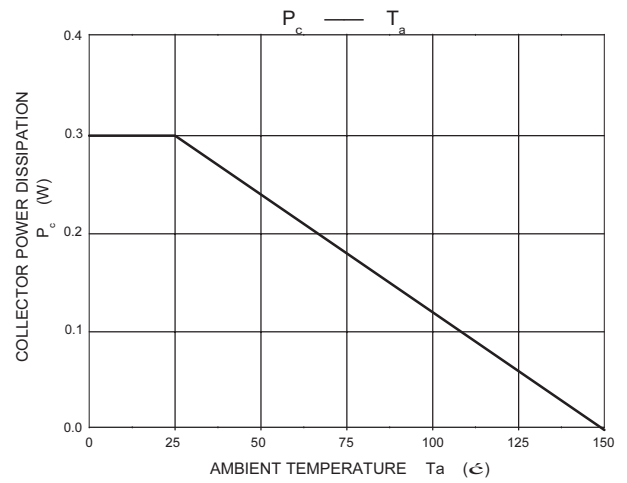
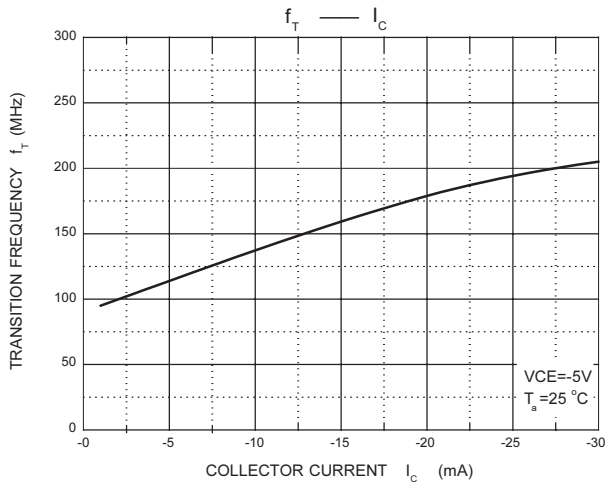
Suggested Solder Pad Layout



MMBT5401



MMBT5401





Micro Commercial Components

Ordering Information :

Device	Packing
Part Number-TP	Tape & Reel; 3 Kpcs/Reel

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

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