



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

2N4403

PNP General Purpose Amplifier

Features

- Halogen free available upon request by adding suffix "-HF"
- Capable of 600mWatts of Power Dissipation
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Marking: Type number
- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C

Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Max	Units
OFF CHARACTERISTICS				
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage* ($I_C=-1.0mA$, $I_B=0$)	-40		Vdc
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage ($I_C=-10\mu A$, $I_E=0$)	-40		Vdc
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage ($I_E=-10\mu A$, $I_C=0$)	-5.0		Vdc
I_{BL}	Base Cutoff Current ($V_{CE}=-30Vdc$, $V_{BE}=-3.0Vdc$)		-0.1	μA
I_{CEX}	Collector Cutoff Current ($V_{CE}=-30Vdc$, $V_{BE}=-3.0Vdc$)		-0.1	μA

ON CHARACTERISTICS

h_{FE}	DC Current Gain* ($I_C=-0.1mA$, $V_{CE}=-1.0Vdc$) ($I_C=-1.0mA$, $V_{CE}=-1.0Vdc$) ($I_C=-10mA$, $V_{CE}=-1.0Vdc$) ($I_C=-150mA$, $V_{CE}=-2.0Vdc$) ($I_C=-500mA$, $V_{CE}=-2.0Vdc$)	30		
		60		
		100		
		100	300	
		20		
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage ($I_C=-150mA$, $I_B=-15mA$) ($I_C=-500mA$, $I_B=-50mA$)		-0.4 -0.75	Vdc
$V_{BE(sat)}$	Base-Emitter Saturation Voltage ($I_C=-150mA$, $I_B=-15mA$) ($I_C=-500mA$, $I_B=-50mA$)	-0.75	-0.95 -1.30	Vdc

SMALL-SIGNAL CHARACTERISTICS

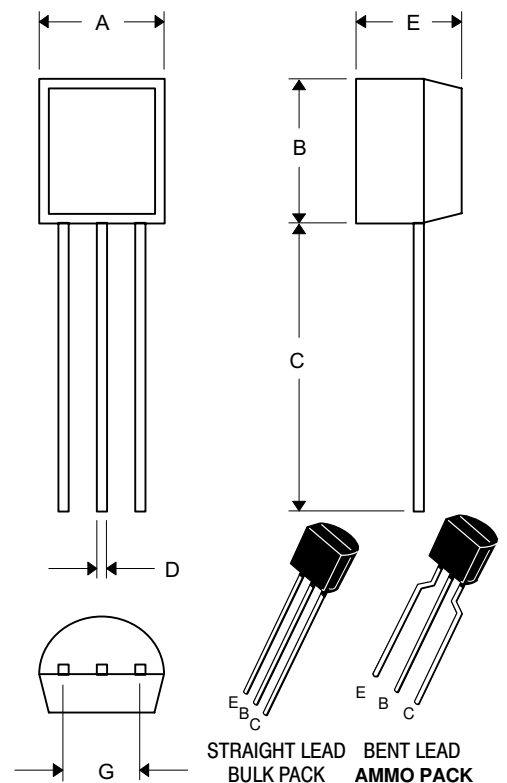
f_T	Current Gain-Bandwidth Product ($I_C=-20mA$, $V_{CE}=-10Vdc$, $f=100MHz$)	200		MHz
C_{cb}	Output Capacitance ($V_{CB}=-10Vdc$, $I_E=0$, $f=140kHz$)		8.5	pF
C_{eb}	Input Capacitance ($V_{EB}=-0.5Vdc$, $I_C=0$, $f=140kHz$)		30.0	pF

SWITCHING CHARACTERISTICS

t_d	Delay Time	($V_{CC}=-3.0Vdc$, $V_{BE}=-2.0Vdc$)	15	ns
t_r	Rise Time	$I_C=-150mA$, $I_{B1}=-15mA$	20	ns
t_s	Storage Time	($V_{CC}=-3.0Vdc$, $I_C=-150mA$)	225	ns
t_f	Fall Time	$I_{B1}=I_{B2}=-15mA$	30	ns

*Pulse Width $\leq 300\mu s$, Duty Cycle $\leq 2.0\%$

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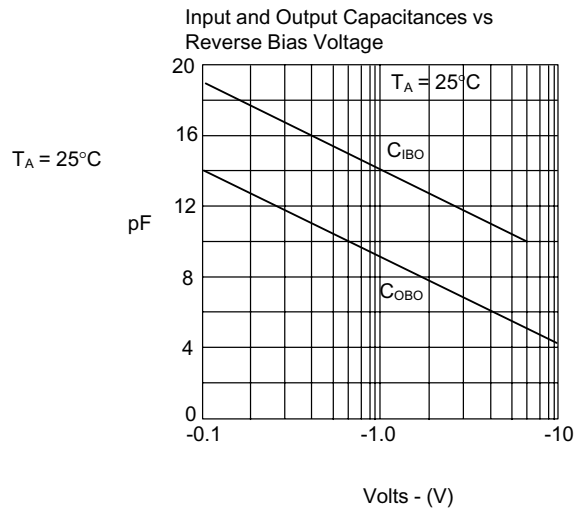
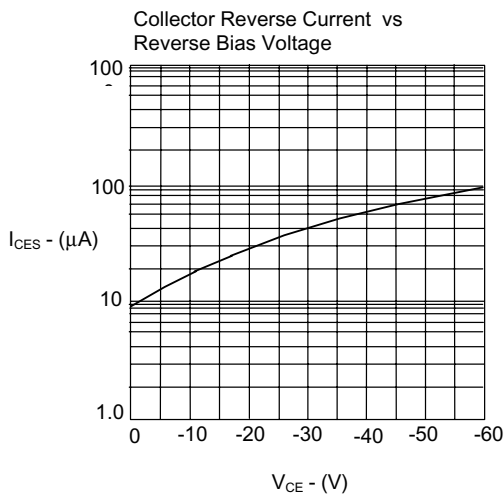
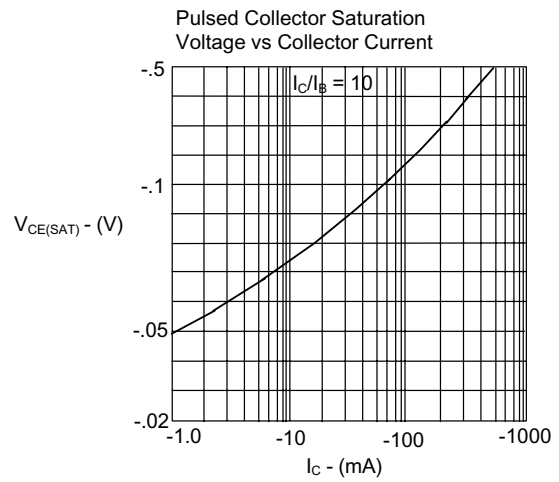
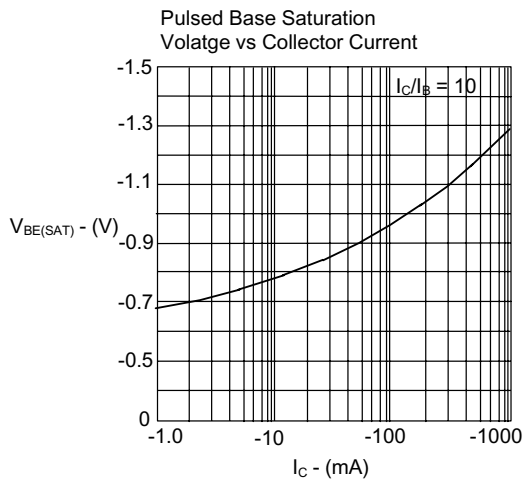
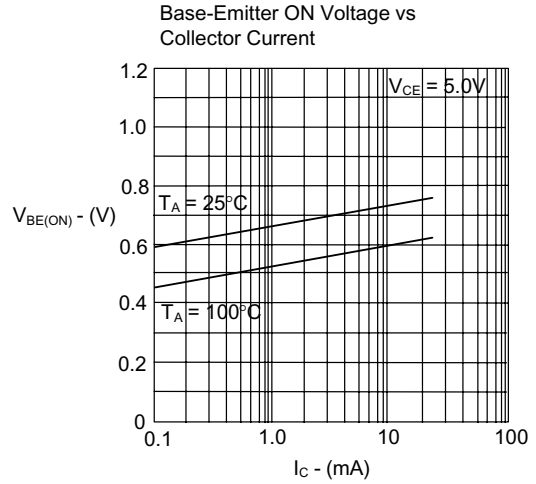
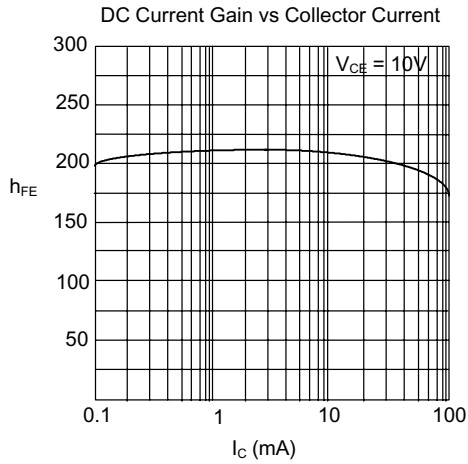


DIMENSIONS

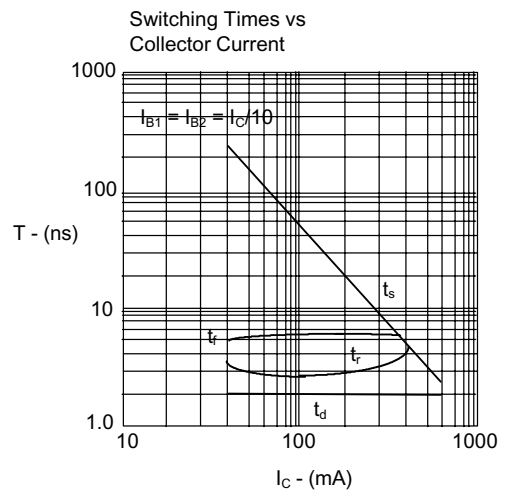
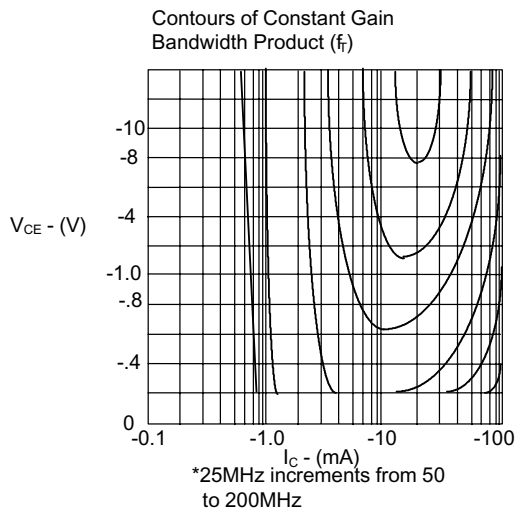
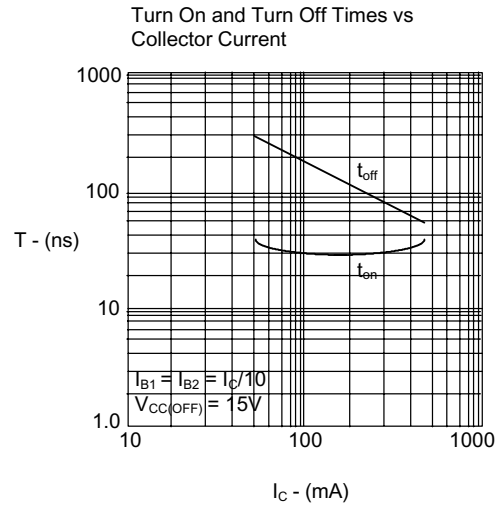
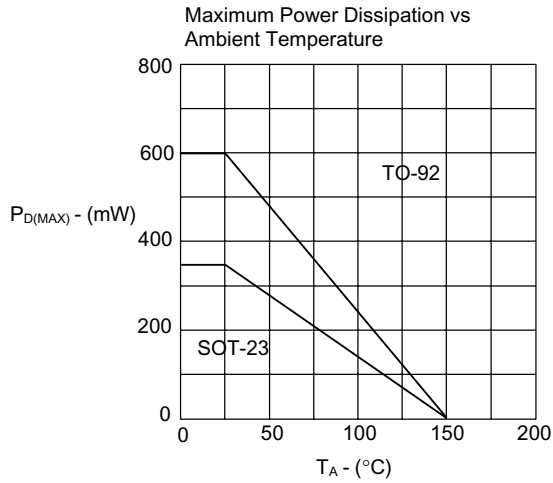
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.175	.185	4.45	4.70	
B	.175	.185	4.45	4.70	
C	.500	---	12.70	---	
D	.016	.020	0.41	0.63	
E	.135	.145	3.43	3.68	
G	.095	.105	2.42	2.67	Straight Lead
	.173	.220	4.40	5.60	Bent Lead

* For ammo packing detailed specification, click here to visit our website of product packaging for details.

www.mccsemi.com



2N4403





TM

Micro Commercial Components

Ordering Information :

Device	Packing
Part Number-AP	Ammo Packing: 20Kpcs/Carton
Part Number-BP	Bulk: 100Kpcs/Carton

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

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