



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

BCP51-10/16
BCP52-10/16
BCP53-10/16

PNP
Plastic-Encapsulate
Transistors

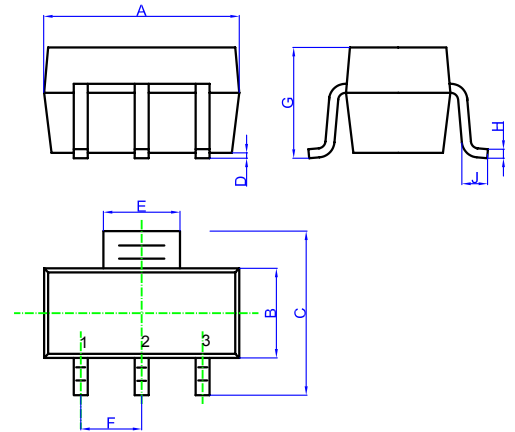
Features

- For AF driver and output stages
High collector current
Low collector-emitter saturation voltage
Complementary types: BCP54 ... BCP56 (NPN)
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
Halogen free available upon request by adding suffix "-HF"

Maximum Ratings @ 25°C Unless Otherwise Specified

Table with 4 columns: Characteristic, Symbol, Value, Unit. Rows include Collector-Base Voltage, Collector-Emitter Voltage, Emitter-Base Voltage, Collector Current-Continuous, Thermal Resistance Junction to Ambient, Collector Power Dissipation, and Operating & Storage Temperature.

SOT-223



1.BASE
2.COLLECTOR
3.EMITTER

Dimension table with columns for DIM, INCHES (MIN, MAX), MM (MIN, MAX), and NOTE. Rows A through J.

# BCP51-10/16 thru BCP53-10/16

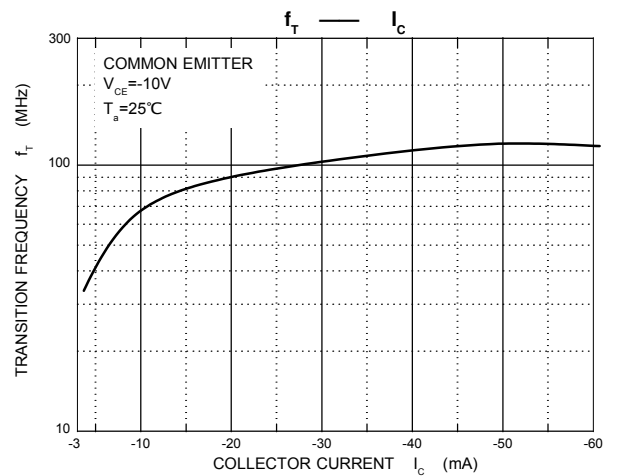
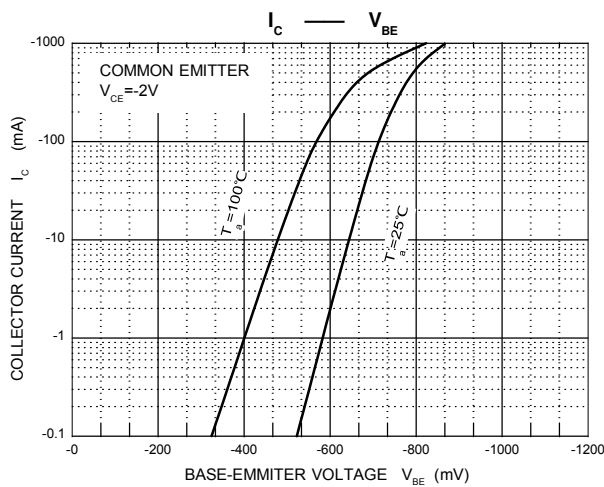
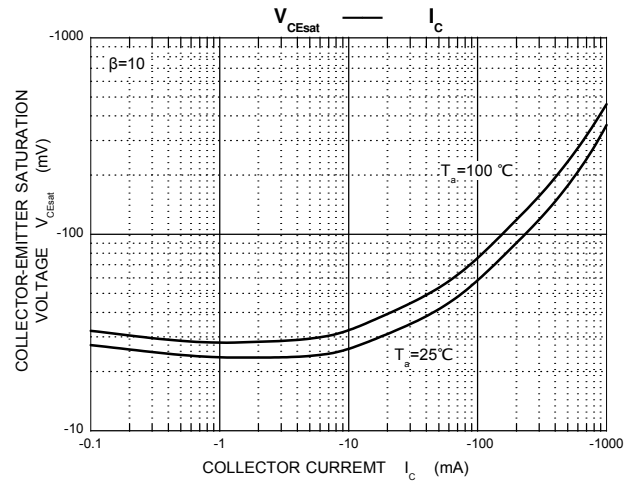
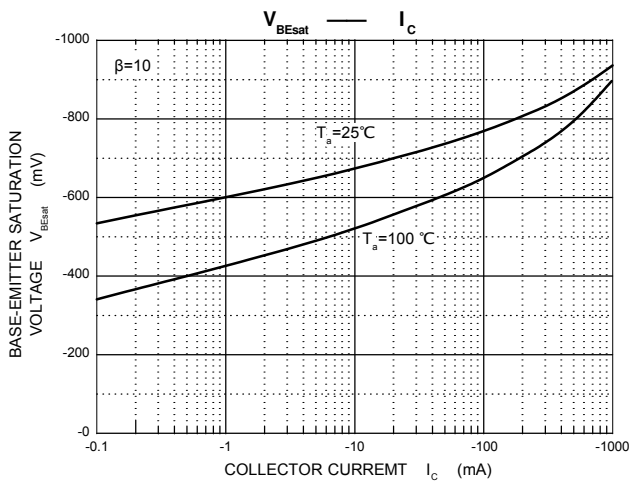
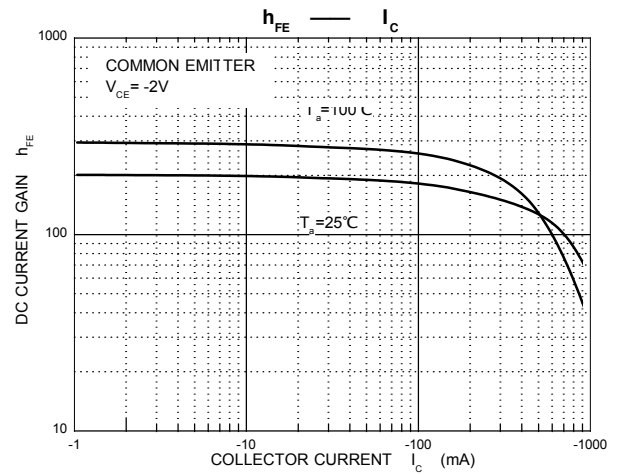
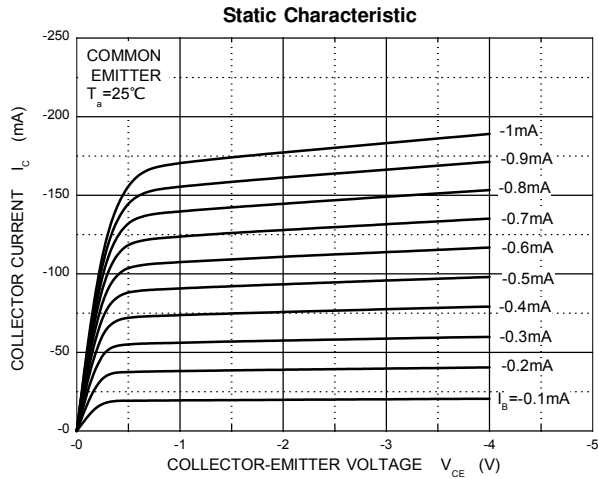
## ELECTRICAL CHARACTERISTICS (T<sub>a</sub>=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Max	Unit
Collector-base breakdown voltage	BCP51-10/16 BCP52-10/16 BCP53-10/16	$V_{(BR)CBO}$ $I_C=-0.1mA, I_E=0$	-45 -60 -100		V
Collector-emitter breakdown voltage	BCP51-10/16 BCP52-10/16 BCP53-10/16	$V_{(BR)CEO}$ $I_C=-10mA, I_B=0$	-45 -60 -80		V
Base-emitter breakdown voltage		$V_{(BR)EBO}$ $I_C=-10\mu A, I_E=0$	-5		V
Collector cut-off current		$I_{CBO}$ $V_{CB}=-30V, I_E=0$		-100	nA
DC current gain		$h_{FE(1)}$ $V_{CE}=-2V, I_C=-5mA$	25		
		$h_{FE(2)}$ $V_{CE}=-2V, I_C=-150mA$	63	250	
		$h_{FE(3)}$ $V_{CE}=-2V, I_C=-500mA$	25		
Collector-emitter saturation voltage		$V_{CE(sat)}$ $I_C=-500mA, I_B=-50mA$		-0.5	V
Base-emitter voltage		$V_{BE}$ $V_{CE}=-2V, I_C=-500mA$		-1	V
Transition frequency		$f_T$ $V_{CE}=-10V, I_C=-50mA, f=100MHz$	100		MHz

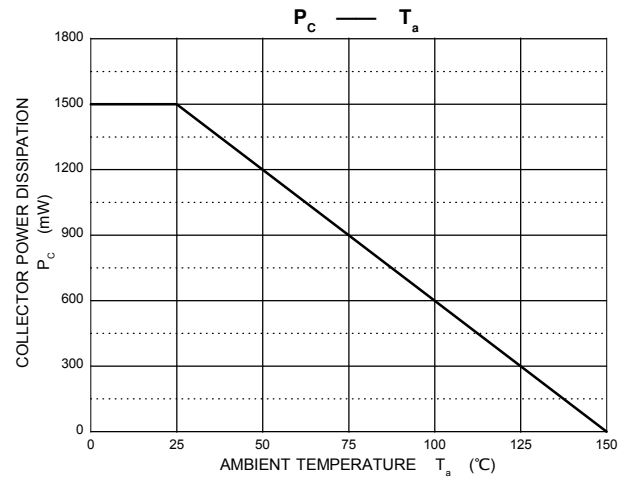
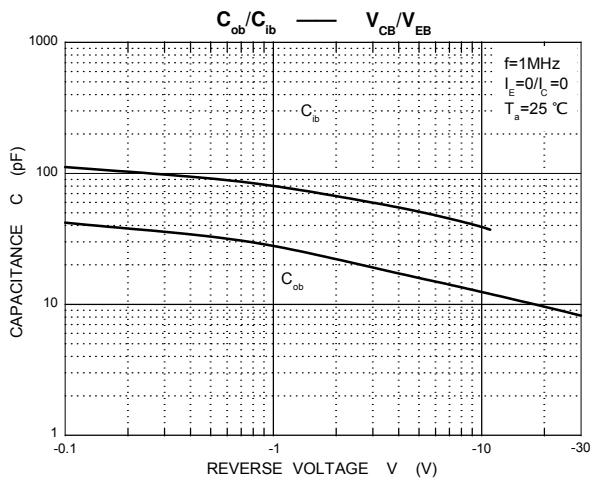
## CLASSIFICATION OF $h_{FE(2)}$

Rank	BCP51-10, BCP52-10, BCP53-10	BCP51-16, BCP52-16, BCP53-16
Range	63-160	100-250

# BCP51-10/16 thru BCP53-10/16



## BCP51-10/16 thru BCP53-10/16





Micro Commercial Components

## Ordering Information :

Device	Packing
Part Number-TP	Tape & Reel; 2.5 Kpcs / Reel

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

### \*\*\*IMPORTANT NOTICE\*\*\*

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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.

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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.

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