



JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO., LTD

TO-92 Plastic-Encapsulate Transistors

BF421
BF423

TRANSISTOR (PNP)

FEATURES

Power dissipation

P_{CM} : 0.625W ($T_{amb}=25$)

Collector current

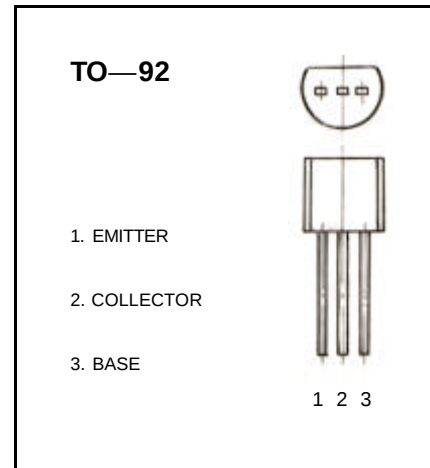
I_{CM} : -50mA

Collector-base voltage

$V_{(BR)CBO}$: BF421 -300 V
BF423 -250 V

Operating and storage junction temperature range

T_J , T_{stg} : -55 to +150



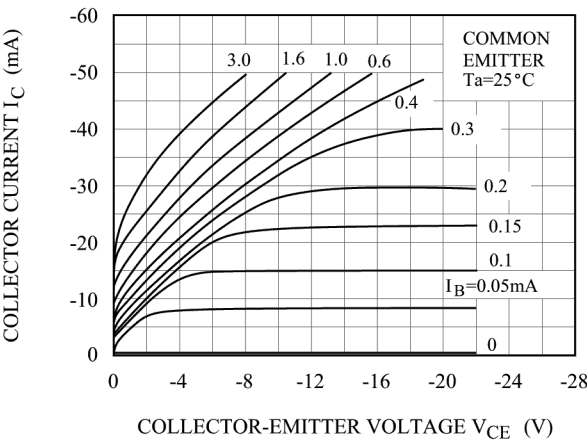
ELECTRICAL CHARACTERISTICS ($T_{amb}=25$ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage BF421 BF423	V_{CBO}	$I_C=-100\mu A$, $I_E=0$	-300 -250			V
Collector-emitter breakdown voltage BF421 BF423	V_{CEO}	$I_C=-1mA$, $I_B=0$	-300 -250			V
Emitter-base breakdown voltage	V_{EBO}	$I_E=-100\mu A$, $I_C=0$	-5			V
Collector cut-off current	I_{CBO}	$V_{CB}=-200V$, $I_E=0$			-0.01	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=-5V$, $I_C=0$			-0.05	μA
DC current gain	h_{FE}	$V_{CE}=-20V$, $I_C=-25mA$	50			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=-30mA$, $I_B=-5mA$			-0.6	V
Transition frequency	f_T	$V_{CE}=-10V$, $I_C=-10mA$	60			MHz

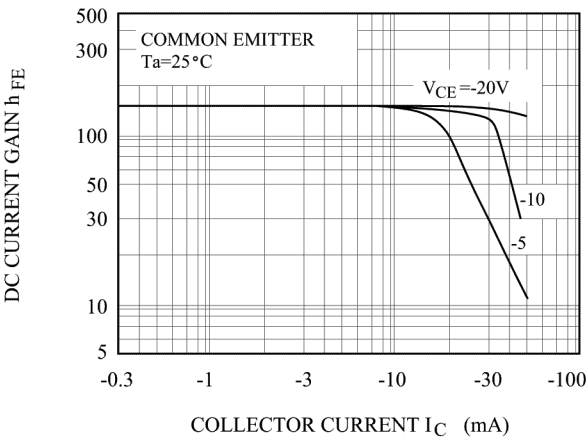
Typical Characteristics

BF421

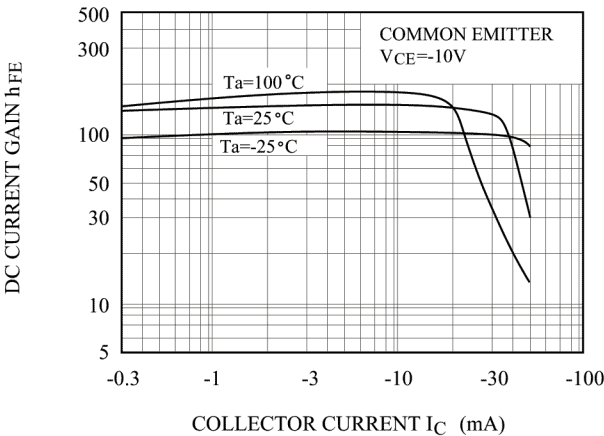
$I_C - V_{CE}$ (LOW VOLTAGE REGION)



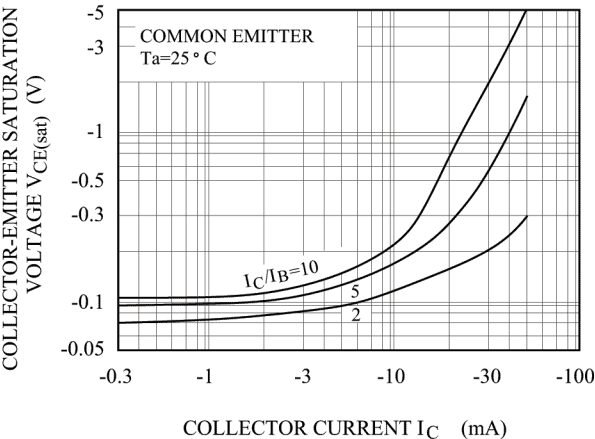
$h_{FE} - I_C$



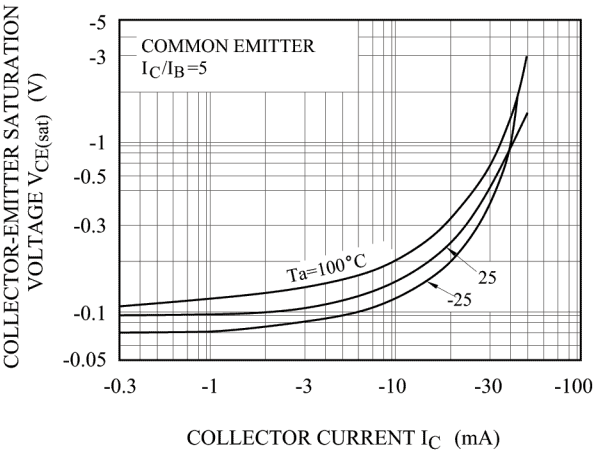
$h_{FE} - I_C$



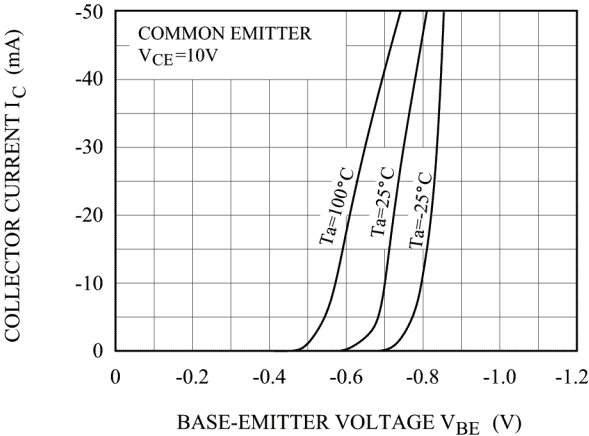
$V_{CE(sat)} - I_C$



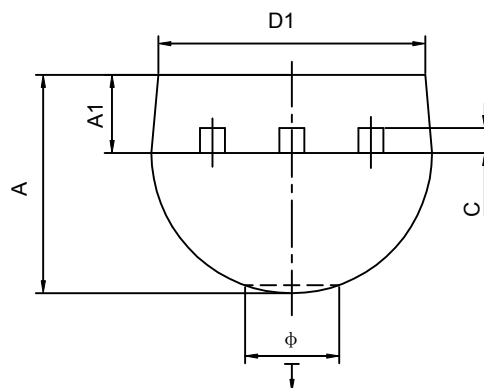
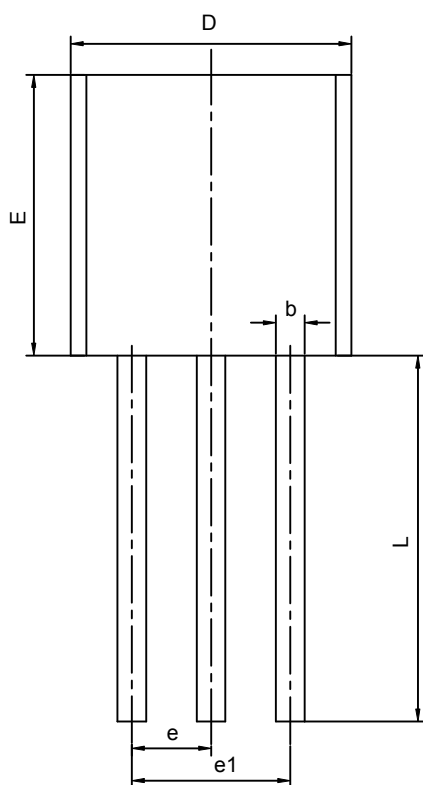
$V_{CE(sat)} - I_C$



$I_C - V_{BE}$



TO-92 PACKAGE OUTLINE DIMENSIONS



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	3.300	3.700	0.130	0.146
A1	1.100	1.400	0.043	0.055
b	0.380	0.550	0.015	0.022
c	0.360	0.510	0.014	0.020
D	4.400	4.700	0.173	0.185
D1	3.430		0.135	
E	4.300	4.700	0.169	0.185
e	1.270TYP		0.050TYP	
e1	2.440	2.640	0.096	0.104
L	14.100	14.500	0.555	0.571
Ø		1.600		0.063
↓	0.000	0.380	0.000	0.015