东莞市华远电子有限公司
DONG GUAN SHI HUA YUAN ELECTRON CO.,LTD.
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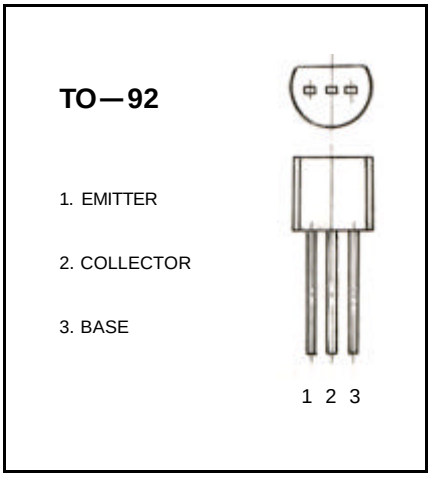
TO-92 Plastic-Encapsulate Transistors

2SC2001 TRANSISTOR（NPN）



FEATURES

Power dissipation

P_{CM} : 0.6 W （Tamb=25℃）

Collector current

I_{CM} : 0.7 A

Collector-base voltage

$V_{(BR)CBO}$: 30 V

Operating and storage junction temperature range

T_J，T_{stg}: -55℃ to +150℃

ELECTRICAL CHARACTERISTICS（Tamb=25℃ unless otherwise specified）

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	Ic=100μA， I_E=0	30		V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=10mA， I_B=0	25		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=100μA， I_C=0	5		V
Collector cut-off current	I_{CBO}	V_{CB}=30 V， I_E=0		0.1	μA
Collector cut-off current	I_{CEO}	V_{CE}=20 V， I_B=0		0.1	μA
Emitter cut-off current	I_{EBO}	V_{EB}=5 V， I_C=0		0.1	μA
DC current gain	h_{FE}	V_{CE}=1V, I_C=100mA	90	400	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=700mA, I_B= 70mA		0.6	V
Base-emitter saturation voltage	$V_{BE(sat)}$	I_C= 700mA, I_B=70mA		1.2	V
Transition frequency	f_T	V_{CE}=6V, I_C= 10mA f = 30MHz	50		MHz

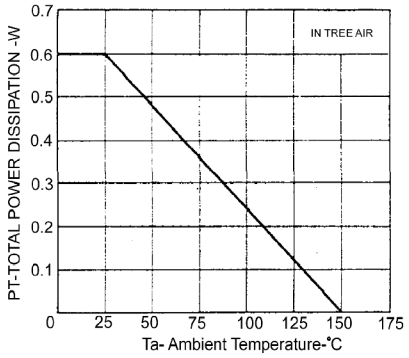
CLASSIFICATION OF h_{FE}

Rank	M	L	K
Range	90-180	135-270	200-400

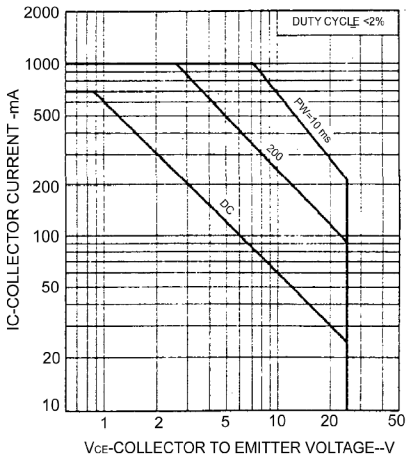
Typical Characteristics

2SC2001

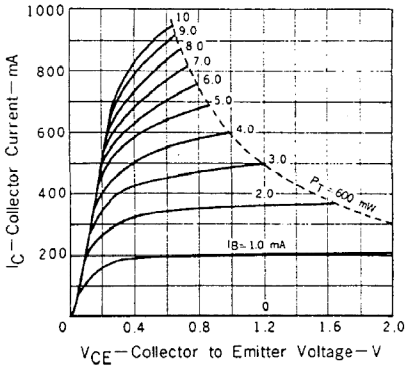
TOTAL POER DISSIP ATION VS
AMBIENT TEMPERATURE



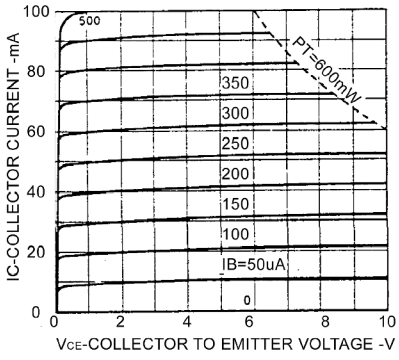
SAFE OPERATING AREA



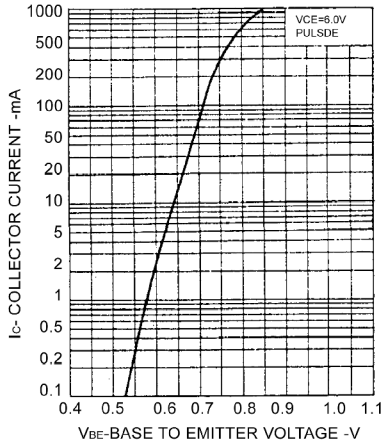
COLLECTOR CURRENT vs.
COLLECTOR TO EMITTER VOLTAGE



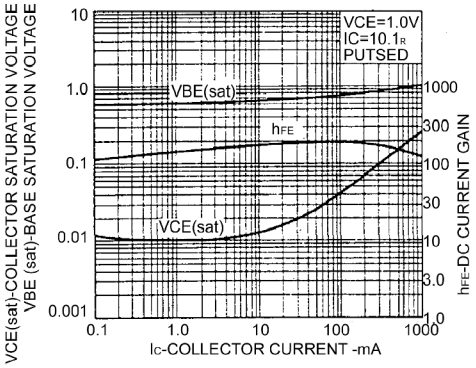
COLLECTOR CURRENT vs.
COLLECTOR TO EMITTER VOLTAGE



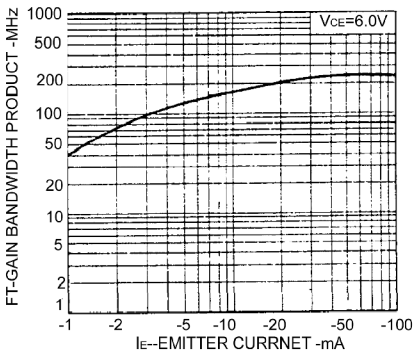
COLLECTOR CURRENT vs.
BASE TO EMITTER VOLTAGE



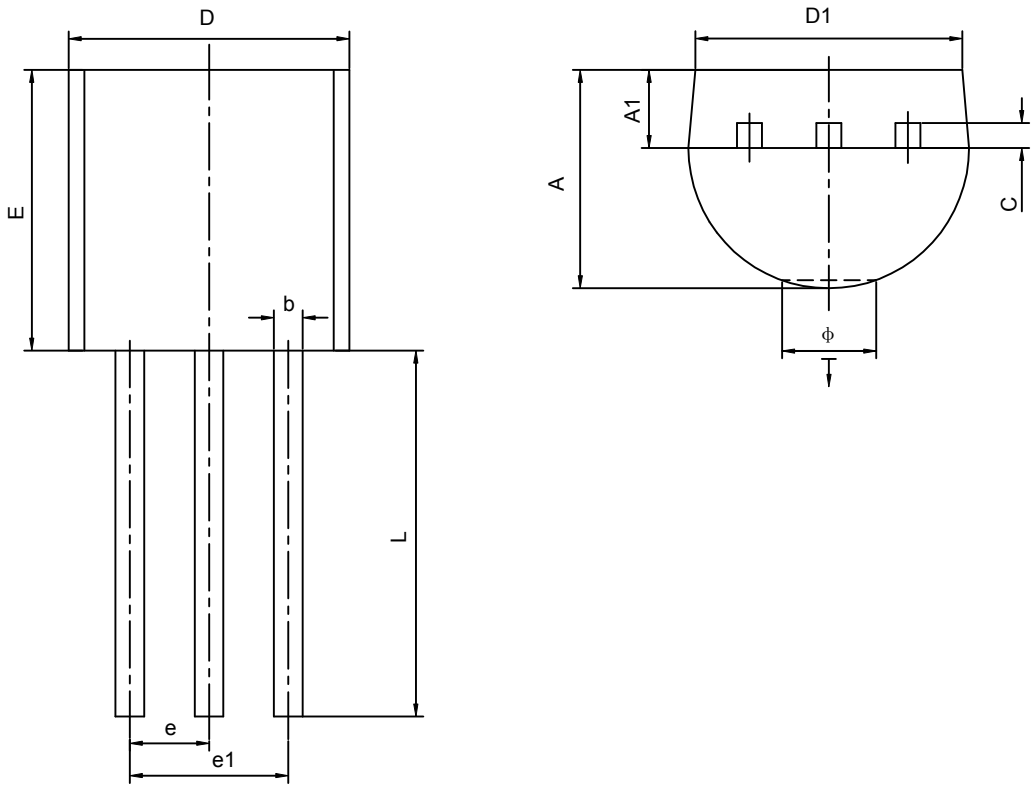
DC CURRENT GAIN.
BASE AND COLLECTOR SATURATION
VOLTAGE VS. COLLECTOR CURRENT



GIAN BANDWIDTH PRODUCT
vs.EMITTER CURRENT



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
Ö		1.600		0.063
⊤	0.000	0.380	0.000	0.015