东莞市华远电子有限公司
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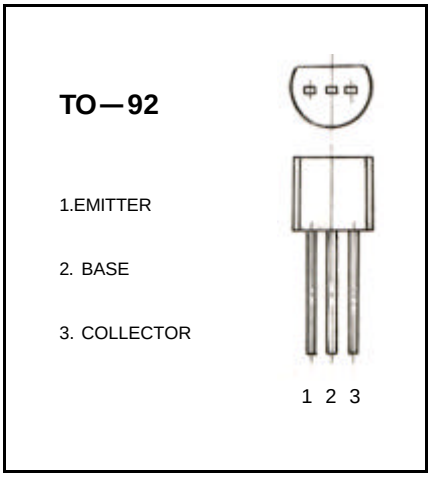
TO-92 Plastic-Encapsulate Transistors

2SC1008 TRANSISTOR（NPN）



FEATURES

Power dissipation

P_{CM} : 0.8 W（Tamb=25℃）

Collector current

I_{CM} : 0.7 A

Collector-base voltage

$V_{(BR)CBO}$: 80 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	TYP	MAX	UNIT
Collector-base breakdown voltage	$V(BR)_{CBO}$	I_C= 100μA， I_E=0	80			V
Collector-emitter breakdown voltage	$V(BR)_{CEO}$	I_C= 10mA， I_B=0	60			V
Emitter-base breakdown voltage	$V(BR)_{EBO}$	I_E= 10μA， I_C=0	8			V
Collector cut-off current	I_{CBO}	V_{CB}=60 V， I_E=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}= 2 V, I_C=50mA	40		400	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C= 500mA, I_B=50 mA			0.4	V
Base-emitter saturation voltage	$V_{BE(sat)}$	I_C=500mA, I_B=50mA			1.1	V
Transition frequency	f_T	V_{CE}=10V, I_C= 50mA	30			MHz

CLASSIFICATION OF h_{FE}

Rank	R	O	Y	G
Range	40-80	70-140	120-240	200-400

Typical Characteristics 2SC1008

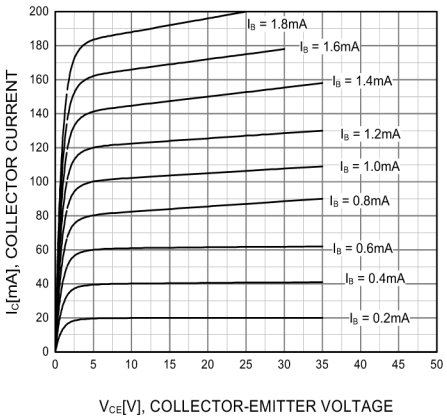


Figure 1. Static Characteristic

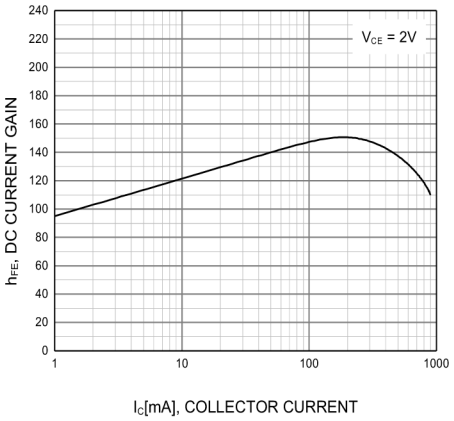


Figure 2. DC current Gain

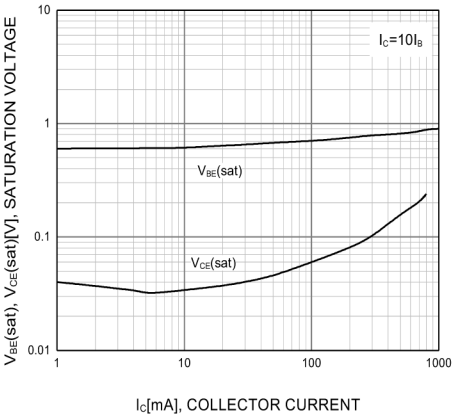


Figure 3. Base-Emitter Saturation Voltage Collector-Emitter Saturation Voltage

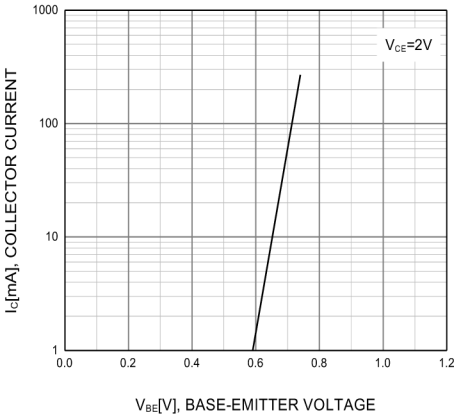


Figure 4. Base-Emitter On Voltage

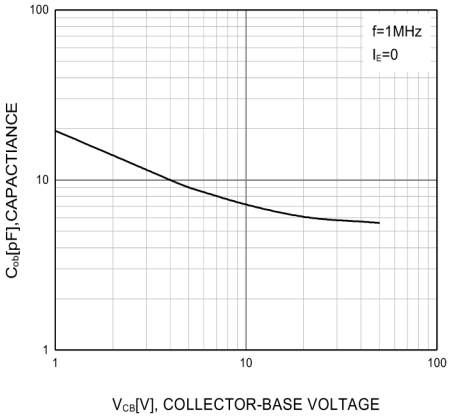
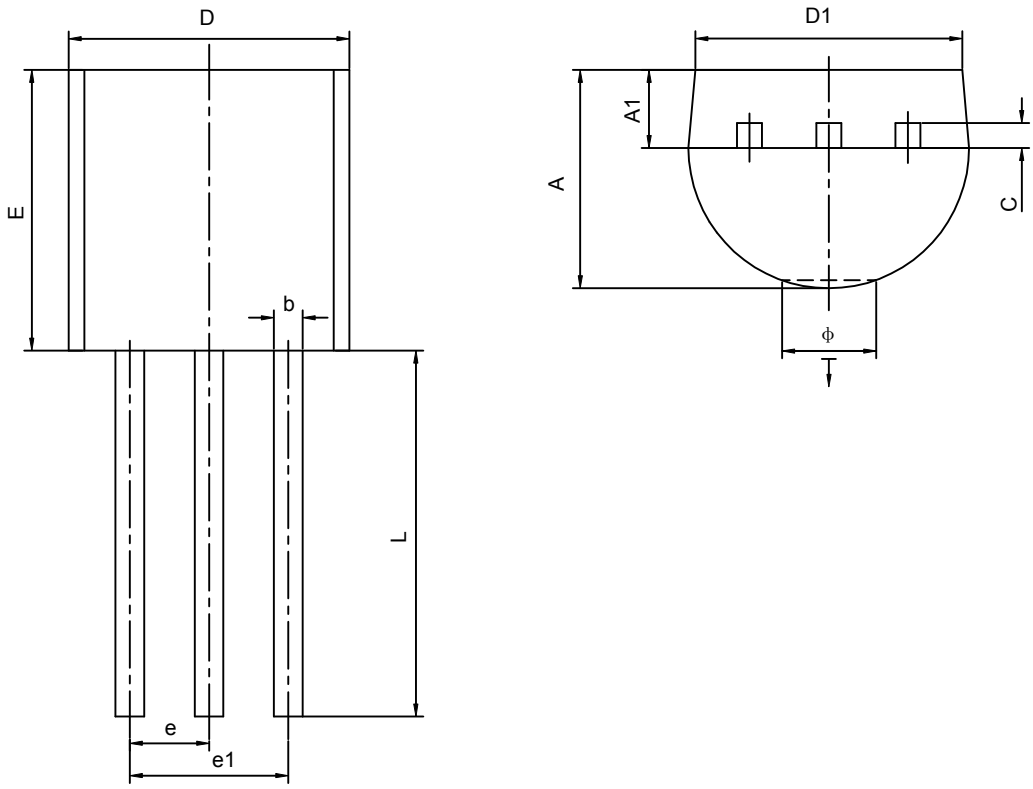


Figure 5. Collector Output Capacitance

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