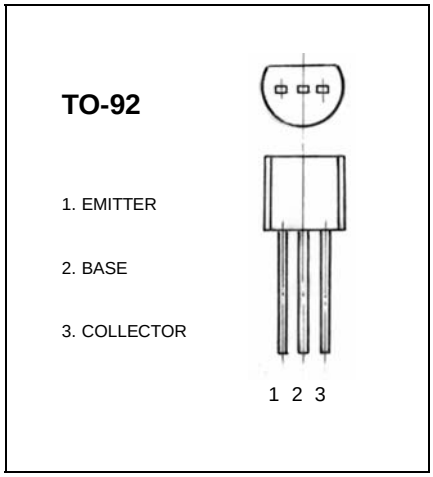
Transys Electronics LIMITED

TO-92 Plastic-Encapsulated 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	$V(BR)_{CBO}$	Ic= 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