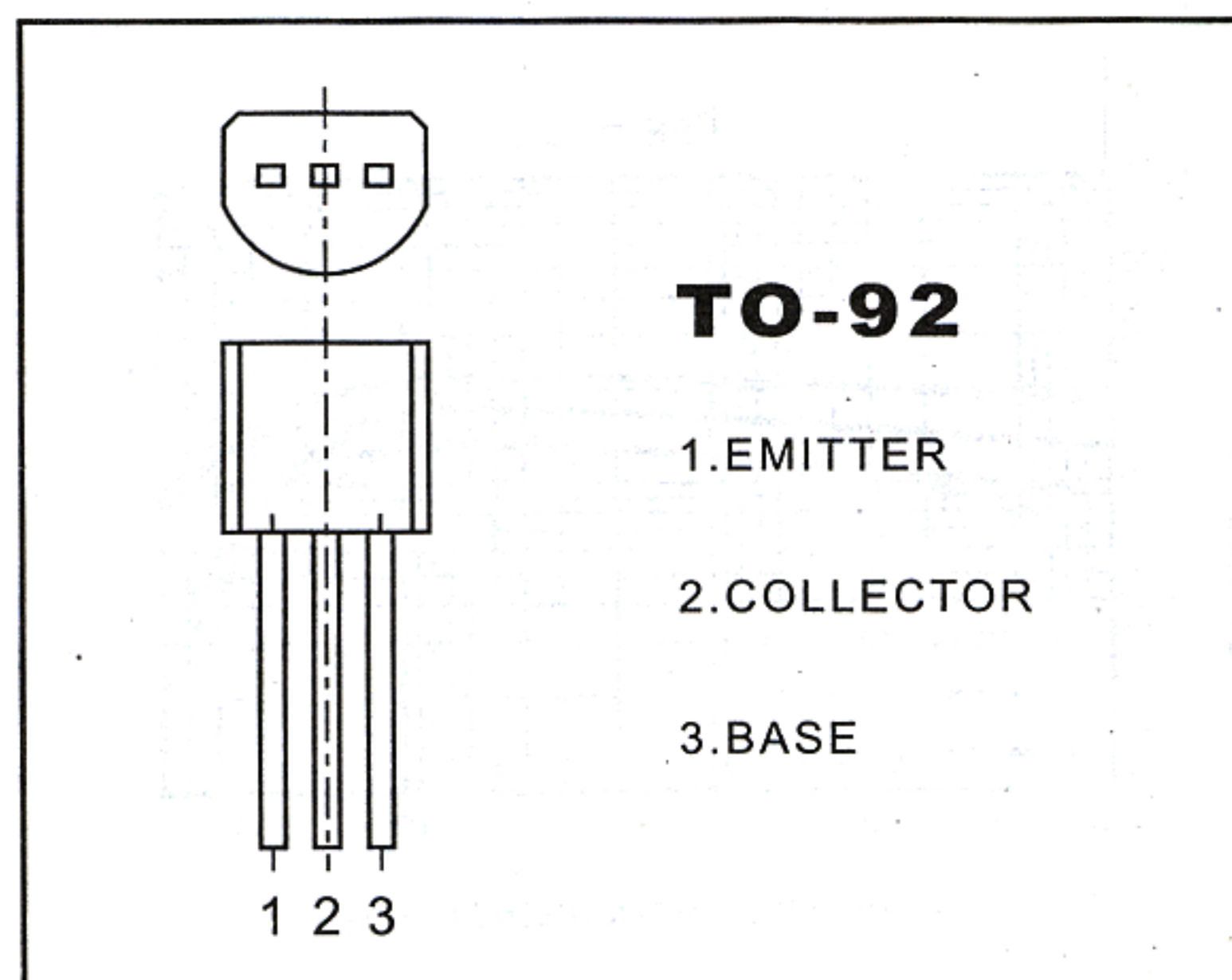


TO-92 Plastic-Encapsulate Transistors

2SC1959 TRANSISTOR(NPN)



FEATURES

Power dissipation

P_{CM} : 0.5W ($T_{amb}=25^{\circ}C$)

Collector current

I_{CM} : 0.5 A

Collector-base voltage

$V_{(BR)CBO}$: 35 V

Operating and storage junction temperature range

T_{stg} : $55^{\circ}C$ to $+150^{\circ}C$

T_J : $150^{\circ}C$

ELECTRICAL CHARACTERISTICS

($T_{amb}=25^{\circ}C$ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = 100 \mu A$, $I_E = 0$	35		V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = 1mA$, $I_B = 0$	30		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = 100 \mu A$, $I_C = 0$	5		V
Collector cut-off current	I_{CBO}	$V_{CB} = 35 V$, $I_E = 0$		0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = 5 V$, $I_C = 0$		0.1	μA
DC current gain	$h_{FE(1)}$	$V_{CE} = 1 V$, $I_C = 100 mA$	70	400	
	$h_{FE(2)}$	$V_{CE} = 6 V$, $I_C = 400 mA$	25		
Collector-emitter saturation voltage	V_{CEsat}	$I_C = 100 mA$, $I_B = 10 mA$		0.25	V
Base-emitter voltage	V_{BE}	$V_{CE} = 1 V$, $I_C = 100 mA$		1	V
Transition frequency	f_T	$V_{CE} = 6 V$, $I_C = 20 mA$	200		MHz

CLASSIFICATION OF $h_{FE(1)}$

Rank		O	Y	GR
Range	$h_{FE(1)}$	70-140	120-240	200-400
	$h_{FE(2)}$	25min	40min	

