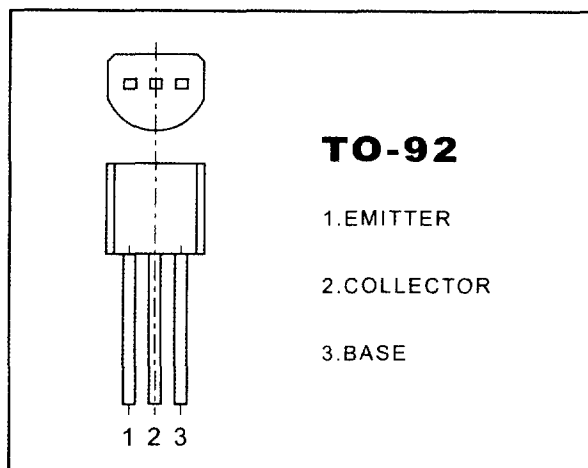


TO-92 Plastic-Encapsulate Transistors

C1815 TRANSISTOR(NPN)



FEATURES

Power dissipation

P_{CM} : 0.4W ($T_{amb}=25^{\circ}C$)

Collector current

I_{CM} : 0.15A

Collector-base voltage

$V_{(BR)CBO}$: 60 V

Operating and storage junction temperature range

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

ELECTRICAL CHARACTERISTICS

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

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = 100 \mu A, I_E = 0$	60		V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = 0.1 mA, I_B = 0$	50		V
Collector cut-off current	I_{CBO}	$V_{CB} = 60 V, I_E = 0$		0.1	μA
Collector cut-off current	I_{CEO}	$V_{CE} = 50 V, I_B = 0$		0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = 5 V, I_C = 0$		0.1	μA
DC current gain	h_{FE}	$V_{CE} = 6 V, I_C = 2 mA$	70	700	
Collector-emitter saturation voltage	V_{CEsat}	$I_C = 100 mA, I_B = 10 mA$		0.25	V
Base-emitter saturation voltage	V_{BEsat}	$I_C = 100 mA, I_B = 10 mA$		1	V
Base-emitter voltage	V_{BE}	$I_E = 310 mA$		1.45	V
Transition frequency	f_T	$V_{CE} = 10 V, I_C = 1 mA$ $f = 30 MHz$	80		MHz

CLASSIFICATION OF $h_{FE}(1)$

Rank	O	Y	GR	BL
Range	70-140	120-240	200-400	350-700

Typical Characteristics

C1815

