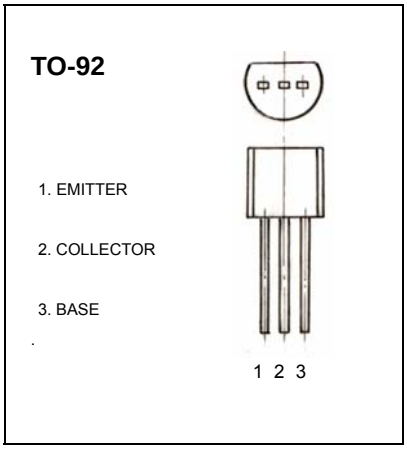
Transys Electronics LIMITED

TO-92 Plastic-Encapsulated Transistors

2SC1674 TRANSISTOR (NPN)



FEATURE

Power dissipation

P_{CM}: 0. 25 W (Tamb=25℃)

Collector current

I_{CM}: 0.02 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= 1 mA, I_B=0	20		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E= 100μA, I_C=0	4		V
Collector cut-off current	I_{CBO}	V_{CB}= 30V, I_E=0		0.1	μA
Emitter cut-off current	I_{EBO}	V_{EB}=3V , I_C=0		0.1	μA
DC current gain	h_{FE}	V_{CE}=6 V, I_C= 1mA	40	180	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=10 mA, I_B= 1 mA		0.3	V
Base-emitter voltage	V_{BE}(ON)	V_{CE}=6 V, I_C= 1mA		0.72	V
Transition frequency	f_T	V_{CE}=6 V, I_C= 1mA	400		MHz
Collector output capacitance	C_{ob}	V_{CE}=6V, I_E=0, f=1MHz		1.5	pF
Noise figure	NF	V_{CE}=6V, I_C=1mA, f=100MHz, R_S=50Ω		5	dB
Power gain	G_P	V_{CE}=6V,I_C=1mA,f=100MHz	18		dB

CLASSIFICATION OF $h_{FE(1)}$

Rank	Y	GR	BL
Range	40-80	60-120	90-180