

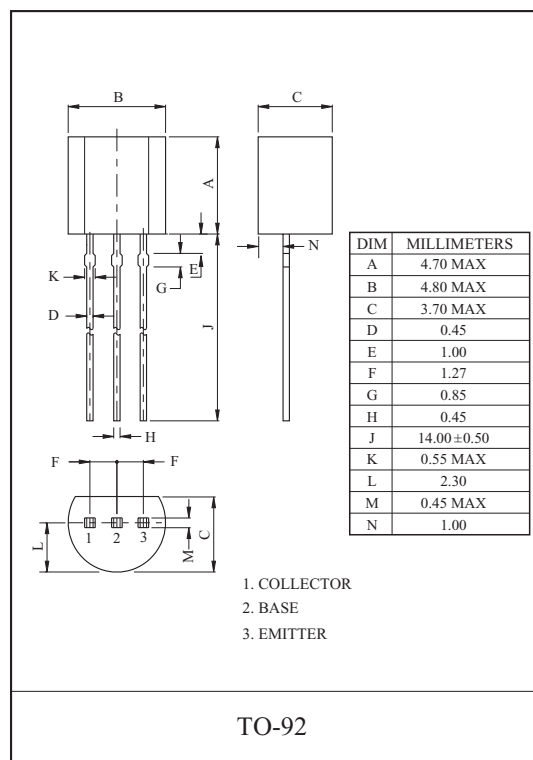
LOW NOISE AMPLIFIER APPLICATION.

FEATURE

- For Complementary with PNP Type BC559/560.

MAXIMUM RATING (Ta=25℃)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage	BC549	V_{CBO}	30	V
	BC550		50	
Collector-Emitter Voltage	BC549	V_{CEO}	30	V
	BC550		45	
Emitter-Base Voltage		V_{EBO}	5	V
Collector Current		I_C	100	mA
Collector Power Dissipation		P_C	625	mW
Junction Temperature		T_j	150	℃
Storage Temperature Range		T_{stg}	-55~150	℃



ELECTRICAL CHARACTERISTICS (Ta=25℃)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector-Emitter Breakdown Voltage	BC549	$V_{(BR)CEO}$	$I_C=10mA, I_B=0$	30	-	-	V
	BC550			45	-	-	
Collector-Base Breakdown Voltage	BC549	$V_{(BR)CBO}$	$I_C=10\mu A, I_E=0$	30	-	-	V
	BC550			50	-	-	
Emitter-Base Breakdown Voltage		$V_{(BR)EBO}$	$I_E=10\mu A, I_C=0$	5.0	-	-	V
Collector Cut-off Current		I_{CBO}	$V_{CB}=30V, I_E=0$	-	-	15	nA
DC Current Gain		$h_{FE}(\text{Note})$	$I_C=2mA, V_{CE}=5V$	110	-	800	
Base-Emitter Voltage		$V_{BE(ON)}$	$I_C=2mA, V_{CE}=5V$	0.55	-	0.7	V
Collector-Emitter Saturation Voltage		$V_{CE(sat)}$	$I_C=100mA, I_B=5mA$	-	-	0.6	V
Base-Emitter Saturation Voltage		$V_{BE(sat)}$	$I_C=100mA, I_B=5mA$	-	0.9	-	V
Transition Frequency		f_T	$I_C=10mA, V_{CE}=5V, f=100MHz$	-	300	-	MHz
Collector Output Capacitance		C_{ob}	$V_{CB}=10V, I_E=0, f=1MHz$	-	-	4.5	pF
Noise Figure	BC549	NF	$I_C=200\mu A, V_{CE}=5V$ $R_g=10k\Omega, f=1kHz$	-	-	4.0	dB
	BC550			-	-	10	

Note : h_{FE} Classification A:110~220, B:200~450, C:420~800