

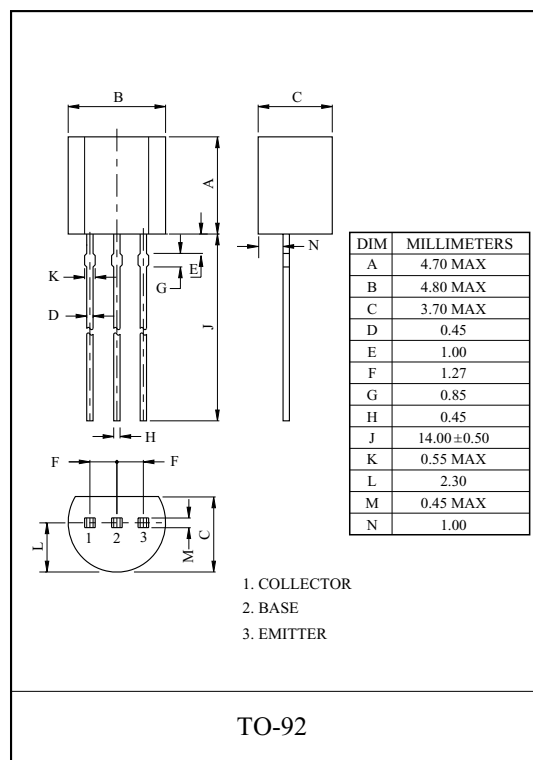
LOW NOISE APPLICATION.

FEATURE

- For Complementary with NPN Type BC549/550.

MAXIMUM RATING (Ta=25 °C)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage	BC559	V_{CBO}	-30	V
	BC560		-50	
Collector-Emitter Voltage	BC559	V_{CEO}	-30	V
	BC560		-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 °C)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector-Emitter Breakdown Voltage	BC559	$V_{(BR)CEO}$	$I_C = -10\text{mA}, I_B = 0$	-30	-	-	V
	BC560			-45	-	-	
Collector-Base Breakdown Voltage	BC559	$V_{(BR)CBO}$	$I_C = -10\text{ }\mu\text{A}, I_E = 0$	-30	-	-	V
	BC560			-50	-	-	
Emitter-Base Breakdown Voltage		$V_{(BR)EBO}$	$I_E = -10\text{ }\mu\text{A}, I_C = 0$	-5.0	-	-	V
Collector Cut-off Current		I_{CBO}	$V_{CB} = -30\text{V}, I_E = 0$	-	-	-15	nA
DC Current Gain		h_{FE}	$I_C = -2\text{mA}, V_{CE} = -5\text{V}$	110	-	800	
Base-Emitter Voltage		$V_{BE(ON)}$	$I_C = -2\text{mA}, V_{CE} = -5\text{V}$	-0.55	-	-0.7	V
Collector-Emitter Saturation Voltage		$V_{CE(sat)}$	$I_C = -100\text{mA}, I_B = -5\text{mA}$	-	-	-0.6	V
Base-Emitter Saturation Voltage		$V_{BE(sat)}$	$I_C = -100\text{mA}, I_B = -5\text{mA}$	-	-0.9	-	V
Transition Frequency		f_T	$I_C = -10\text{mA}, V_{CE} = -5\text{V}, f = 100\text{MHz}$	-	300	-	MHz
Collector Output Capacitance		C_{ob}	$V_{CB} = -10\text{V}, I_E = 0, f = 1\text{MHz}$	-	-	7.0	pF
Noise Figure		NF	$I_C = -200\text{ }\mu\text{A}, V_{CE} = -5\text{V}$ $R_g = 10\text{k}\Omega, f = 1\text{kHz}$	-	-	4.0	dB

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