

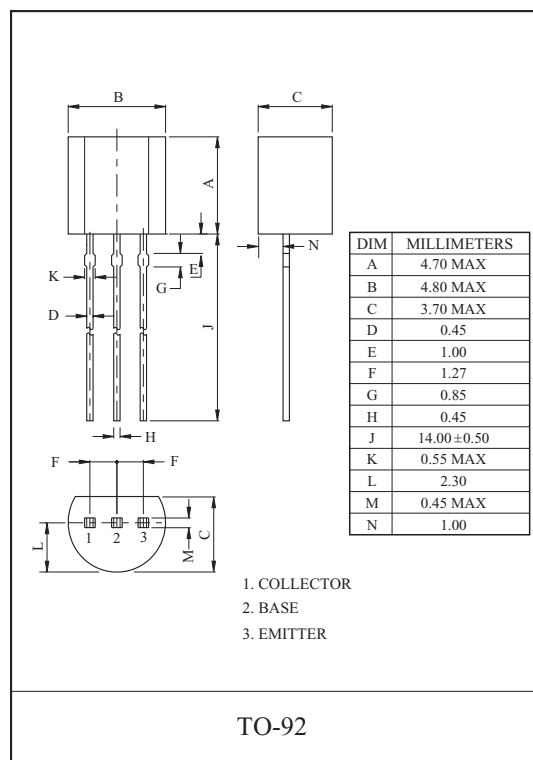
GENERAL PURPOSE APPLICATION.
SWITCHING APPLICATION .

FEATURES

- For Complementary With NPN Type BC546/547/548.

MAXIMUM RATING (Ta=25 °C)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage	BC556	V_{CBO}	-80	V
	BC557		-50	
	BC558		-30	
Collector-Emitter Voltage	BC556	V_{CEO}	-65	V
	BC557		-45	
	BC558		-30	
Emitter-Base Voltage	BC556	V_{EBO}	-5	V
	BC557		-5	
	BC558		-5	
Collector Current	BC556	I_C	-100	mA
	BC557		-100	
	BC558		-100	
Emitter Current	BC556	I_E	100	mA
	BC557		100	
	BC558		100	
Collector Power Dissipation		P_C	625	mW
Junction Temperature		T_j	150	°C
Storage Temperature Range		T_{stg}	-55~150	°C



BC556/7/8

ELECTRICAL CHARACTERISTICS (Ta=25 °C)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current		I_{CBO}	$V_{CB}=-30V, I_E=0$	-	-	-15	nA
DC Current Gain (Note)	BC556	h_{FE}	$V_{CE}=-5V, I_C=-2mA$	110	-	450	
	BC557			110	-	800	
	BC558			110	-	800	
Collector-Emitter Saturation Voltage	BC556	$V_{CE(sat)}$	$I_C=-100mA, I_B=-5mA$	-	-	-0.65	V
	BC557			-	-	-0.65	
	BC558			-	-	-0.65	
Base-Emitter Saturation Voltage	BC556	$V_{BE(sat)}$	$I_C=-100mA, I_E=-5mA$	-	-0.9	-1.1	V
	BC557			-	-0.9	-1.1	
	BC558			-	-0.9	-1.1	
Base-Emitter Voltage		$V_{BE(ON)1}$	$V_{CE}=-5V, I_C=-2mA$	-0.6	-	-0.75	V
		$V_{BE(ON)2}$	$V_{CE}=-5V, I_C=-10mA$	-	-	-0.8	V
Transition Frequency		f_T	$V_{CE}=-5V, I_C=-10mA, f=100MHz$	-	150	-	MHz
Collector Output Capacitance		C_{ob}	$V_{CB}=-10V, f=1MHz, I_E=0$	-	4.5	-	pF
Noise Figure	BC556	NF	$V_{CE}=-6V, I_C=-0.1mA$ $R_g=10k\Omega, f=1kHz$	-	1.0	10	dB
	BC557			-	1.0	10	
	BC558			-	1.0	10	

NOTE : According to the value of h_{FE} the BC546, BC547, BC548 are classified as follows.

CLASSIFICATION		none	A	B	C
h_{FE}	BC556	110 ~ 450	110 ~ 220	200 ~ 450	-
	BC557	110 ~ 800	110 ~ 220	200 ~ 450	420 ~ 800
	BC558	110 ~ 800	110 ~ 220	200 ~ 450	420 ~ 800

