

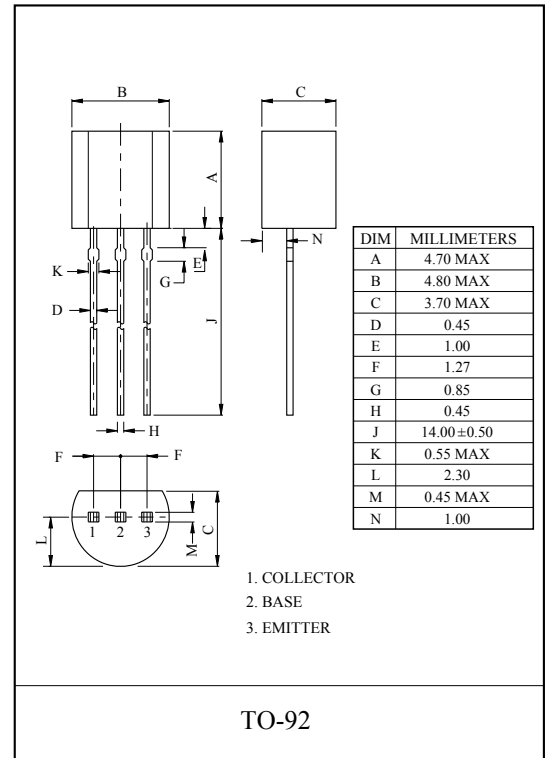
GENERAL PURPOSE APPLICATION.  
SWITCHING APPLICATION .

#### FEATURES

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

#### MAXIMUM RATING (Ta=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	BC556	-80	V
	BC557	-50	
	BC558	-30	
Collector-Emitter Voltage	BC556	-65	V
	BC557	-45	
	BC558	-30	
Emitter-Base Voltage	BC556	-5	V
	BC557	-5	
	BC558	-5	
Collector Current	BC556	-100	mA
	BC557	-100	
	BC558	-100	
Emitter Current	BC556	100	mA
	BC557	100	
	BC558	100	
Collector Power Dissipation	P <sub>C</sub>	625	mW
Junction Temperature	T <sub>j</sub>	150	°C
Storage Temperature Range	T <sub>stg</sub>	-55 ~ 150	°C



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## 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	$V_{BE(sat)}$	$I_C=-100mA, I_C=-5mA$	-	-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

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