

isc Silicon PNP Transistor

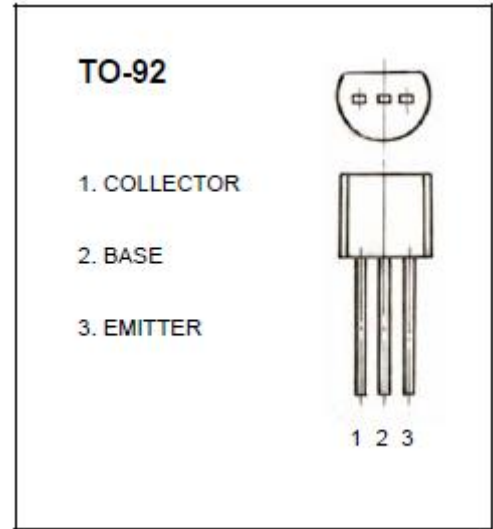
BC556/BC557/BC558

DESCRIPTION

- High Voltage
- Complement to Type BC546, BC547, BC548

APPLICATIONS

- For TV and home appliance equipment.



ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

SYMBOL	PARAMETER	VALUE	UNIT	
V _{CBO}	Collector-Base Voltage	BC556	-80	V
		BC557	-50	
		BC558	-30	
V _{CEO}	Collector-Emitter Voltage	BC556	-65	V
		BC557	-45	
		BC558	-30	
V _{EBO}	Emitter-Base Voltage	-6	V	
I _C	Collector Current-Continuous	-100	mA	
P _C	Collector Power Dissipation	625	mW	
R _{th j-a}	Thermal Resistance,Junction to Ambient	200	°C/W	
T _J	Junction Temperature	150	°C	
T _{stg}	Storage Temperature Range	-55~150	°C	

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ELECTRICAL CHARACTERISTICS

 $T_C=25^\circ\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage	BC556	$I_C=-0.1\text{mA}; I_E=0$	-80		V
		BC557		-50		
		BC558		-30		
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	BC556	$I_C=-2\text{mA}; I_B=0$	-65		V
		BC557		-45		
		BC558		-30		
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	$I_E=-100\mu\text{A}; I_C=0$	-5			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=-10\text{mA}; I_B=-0.5\text{mA}$			-0.3	V
		$I_C=-100\text{mA}; I_B=-5\text{mA}$			-0.65	
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C=-10\text{mA}; I_B=-0.5\text{mA}$			-0.8	V
		$I_C=-100\text{mA}; I_B=-5\text{mA}$			-1.1	
I_{CBO}	Collector Cutoff Current	BC556	$V_{CB}=-70\text{V}; I_E=0$		-0.1	μA
		BC557	$V_{CB}=-45\text{V}; I_E=0$		-0.1	
		BC558	$V_{CB}=-25\text{V}; I_E=0$		-0.1	
I_{CEO}	Collector Cutoff Current	BC556	$V_{CE}=-60\text{V}; I_B=0$		-0.1	μA
		BC557	$V_{CB}=-40\text{V}; I_E=0$		-0.1	
		BC558	$V_{CB}=-25\text{V}; I_E=0$		-0.1	
I_{EBO}	Emitter Cutoff Current	$V_{EB}=-5\text{V}; I_C=0$			0.1	μA
h_{FE}	DC Current Gain	$I_C=-2\text{mA}; V_{CE}=-5\text{V}$	120		800	
f_T	Current-Gain—Bandwidth Product	BC556	$I_C=-10\text{mA}; V_{CE}=-5\text{V}; f=50\text{MHz}$		280	MHz
		BC557			320	
		BC558			360	

◆ h_{FE} Classifications

A	B	C
120-220	180-460	420-800