

△SWITCHING AND AMPLIFIER

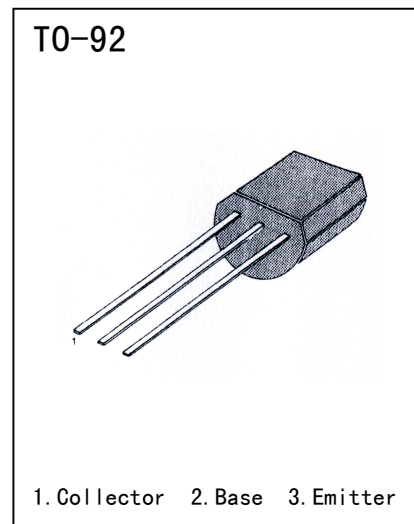
- Complement to BC558

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△ABSOLUTE MAXIMUM RATINGS (TA=25°C)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V _{CB0}	30	V
Collector-Emitter Voltage	V _{CE0}	30	V
Emitter-Base Voltage	V _{EB0}	5	V
Collector Current (DC)	I _C	100	MA
Collector Dissipation	P _C	500	MW
Junction Temperature	T _J	125	°C
Storage Temperature	T _{STG}	-55-125	°C



△ELECTRICAL CHARACTERISTICS (TA=25°C)

Characteristic	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector Cut-off Current	I _{CB0}	V _{CB} =30V, I _E =0			15	nA
Collector Emitter Breakdown Voltage	BV _{CE0}	I _C =1mA, I _B =0	30			V
Emitter Base Breakdown Voltage	BV _{EB0}	I _E =10μA, I _C =0	5			V
Collector Base Breakdown Voltage	BV _{CB0}	I _C =100μA, I _E =0	30			V
Collector-Emitter Saturation Voltage	V _{CE(sat)}	I _C =10mA, I _B =0.5mA		0.09	0.25	V
	V _{CE(sat)}	I _C =100mA, I _B =5mA		0.2	0.6	V
Base-Emitter Saturation Voltage	V _{BE(sat)}	I _C =10mA, I _B =0.5mA		0.7	0.8	V
	V _{BE(sat)}	I _C =100mA, I _B =5mA		0.9	1.0	V
Base-Emitter On Voltage	V _{BE(on)}	V _{CE} =5V, I _C =2mA	0.58	0.66	0.7	V
	V _{BE(on)}	V _{CE} =5V, I _C =10mA			0.72	V
DC Current Gain	H _{FE1}	V _{CE} =5V, I _C =2mA	110		800	
Current Gain Bandwidth Product	f _T	V _{CE} =5V, I _C =10mA		300		MHz
Collector Base Capacitance	C _{CB0}	V _{CB} =10V, f=1MHz		3.5	6	pF
Emitter Base Capacitance	C _{EB0}	V _{EB} =0.5V, f=1MHz		9		pF

△H_{FE} CLASSIFICATION A:110-220 B:200-450 C:420-800

A	B	C
110-200	200-450	420-800