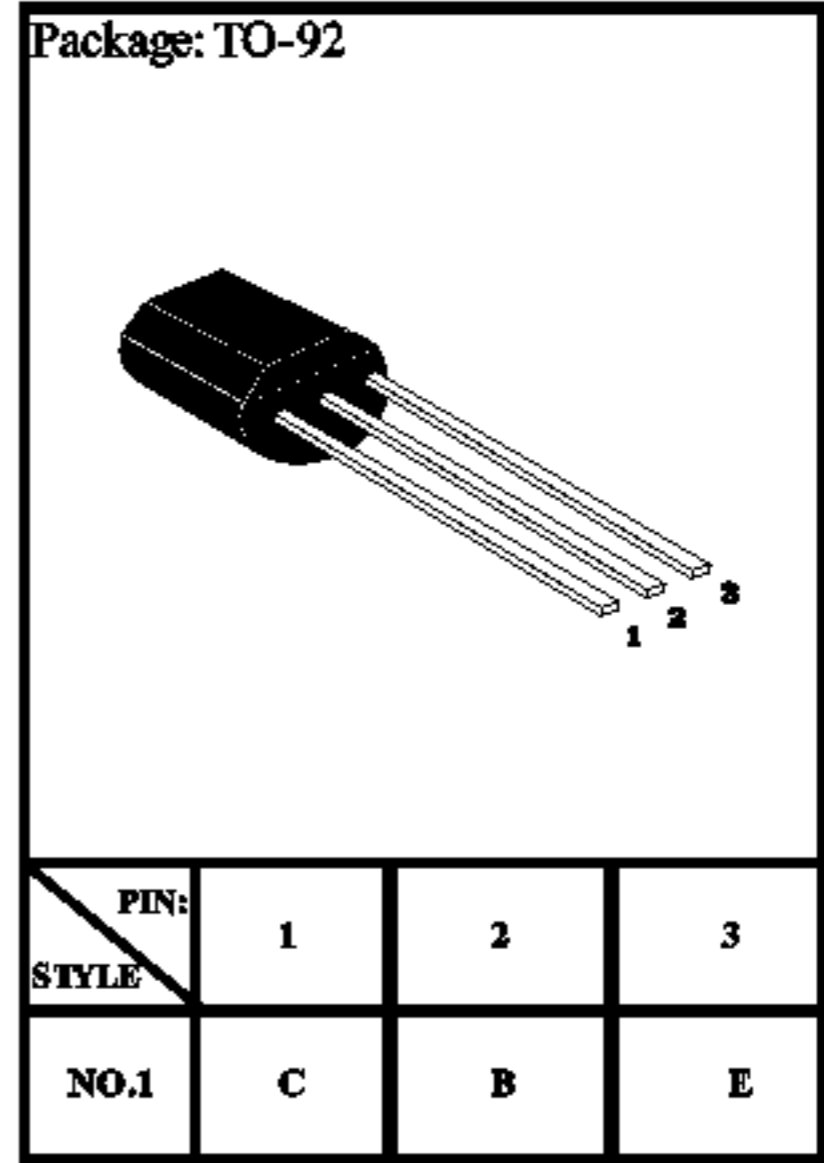




SWITCHING AND AMPLIFIER

- * High Voltage
- * Collector-Emitter Voltage $V_{ce0}=65V$
- * Complement to Bc556



ABSOLUTE MAXIMUM RATINGS at $T_{amb}=25^{\circ}C$

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V_{cbo}	80	V
Collector-Emitter Voltage	V_{ceo}	65	V
Emitter-Base Voltage	V_{ebo}	6	V
Collector Current	I_c	100	mA
Collector Dissipation	P_c	500	mW
Junction Temperature	T_j	150	$^{\circ}C$
Storage Temperature	T_{stg}	-55~150	$^{\circ}C$

ELECTRICAL CHARACTERISTICS at $T_{amb}=25^{\circ}C$

Characteristic	Symbol	Min	Typ	Max	Unit	Test Conditions
Collector-Base Breakdown Voltage	BV_{cbo}	80			V	$I_c=100\mu A$ $I_e=0$
Collector-Emitter Breakdown Voltage	BV_{ceo}	65			V	$I_c=10mA$ $I_b=0$
Emitter-Base Breakdown Voltage	BV_{ebo}	6			V	$I_e=100\mu A$ $I_c=0$
Collector Cutoff Current	I_{cbo}			50	nA	$V_{cb}=30V$ $I_e=0$
DC Current Gain	H_{fe}	110		800		$V_{ce}=5V$ $I_c=2mA$
Collector-Emitter Saturation Voltage	$V_{ce(sat)}$		0.09	0.25	V	$I_c=10mA$ $I_b=0.5mA$
Collector-Emitter Saturation Voltage	$V_{ce(sat)}$		0.20	0.6	V	$I_c=100mA$ $I_b=5mA$
Base-Emitter Saturation Voltage	$V_{be(sat)}$		0.70	0.8	V	$I_c=10mA$ $I_b=0.5mA$
Base-Emitter Saturation Voltage	$V_{be(sat)}$		0.90	1.00	V	$I_c=100mA$ $I_b=5mA$
Base-Emitter On Voltage	$V_{be(on)}$	0.58	0.66	0.7	V	$V_{ce}=5V$ $I_c=2mA$
Base-Emitter On Voltage	$V_{be(on)}$			0.72	V	$V_{ce}=5V$ $I_c=10mA$
Collector-Base Capacitance	C_{cb}		3.5	6	pF	$V_{cb}=10V$ $I_e=0$ $f=1MHz$
Emitter-Base Capacitance	C_{eb}		9		pF	$V_{eb}=0.5V$ $I_c=0$ $f=1MHz$
Current Gain-Bandwidth Product	f_T		300		MHz	$V_{ce}=5V$ $I_c=10mA$ $f=100MHz$
Noise Figure	NF		2	10	dB	$V_{ce}=5V$ $I_c=200\mu A$ $f=1KHz$ $R_g=2K\Omega$

CLASSIFICATION HFE

Classification	A	B	C
Hfe	110-220	200-450	420-800