

# Transistors

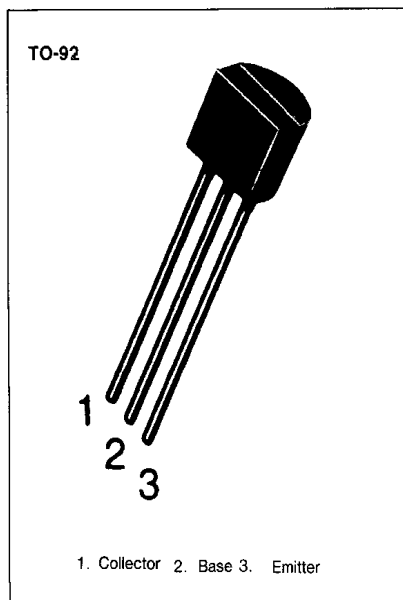
## BC328

### SWITCHING AND AMPLIFIER APPLICATIONS

• SUITABLE FOR AF-DRIVER STAGES AND LOW POWER OUTPUT STAGES

### ABSOLUTE MAXIMUM RATINGS ( $T_a = 25^\circ\text{C}$ )

Characteristic	Symbol	Rating	Unit
Collector Emitter Voltage	$V_{CES}$	-30	V
Collector Emitter Voltage	$V_{CEO}$	-25	V
Emitter-Base Voltage	$V_{EBO}$	-5	V
Collector Current (DC)	$I_C$	-800	mA
Collector Dissipation	$P_C$	625	mW
Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature	$T_{stg}$	-55~150	$^\circ\text{C}$



### ELECTRICAL CHARACTERISTICS ( $T_a = 25^\circ\text{C}$ )

Characteristic	Symbol	Test Condition	Min	Typ	Max	Unit
Collector Emitter Breakdown Voltage	$BV_{CEO}$	$I_C = -10\text{mA}, I_B = 0$	-25			V
Collector Emitter Breakdown Voltage	$BV_{CES}$	$I_C = -0.1\text{mA}, I_B = 0$	-30			V
Emitter Base Breakdown Voltage	$BV_{EBO}$	$I_E = -0.1\text{mA}, I_C = 0$	-5			V
Collector Cutoff Current	$I_{CES}$	$V_{CE} = -25\text{V}, I_B = 0$		-2	-100	nA
DC Current Gain	$h_{FE}$	$V_{CE} = -1\text{V}, I_C = -100\text{mA}$	100		630	
	$h_{FE2}$	$V_{CE} = -1\text{V}, I_C = -30\text{mA}$	60			
Collector Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -500\text{mA}, I_B = -50\text{mA}$			-0.7	V
Base Emitter On Voltage	$V_{BE(on)}$	$V_{CE} = -1\text{V}, I_C = -300\text{mA}$			-1.2	V
Current Gain Bandwidth Product	$f_T$	$V_{CE} = -5\text{V}, I_C = -10\text{mA}, f = 50\text{MHz}$		100		MHz
Collector Base Capacitance	$C_{CBO}$	$V_{CB} = -10\text{V}, f = 1\text{MHz}$		12		pF

### $h_{FE}$ CLASSIFICATION

Classification	16	25	40
$h_{FE}$	100-250	160-400	250-630
$h_{FE2}$	60-	100-	170-

