

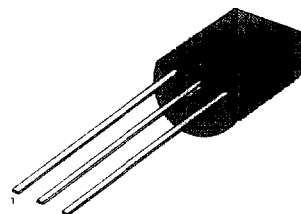
SWITCHING AND AMPLIFIER APPLICATIONS

- Suitable for AF-Driver stages and low power output stages
- Complement to BC337/BC338

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

Characteristic	Symbol	Rating	Unit
Collector-Emitter Voltage	V_{CES}		
:BC327		-50	V
:BC328		-30	V
Collector-Emitter Voltage	V_{CEO}		
:BC327		-45	V
:BC328		-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	$^\circ\text{C}$

TO-92



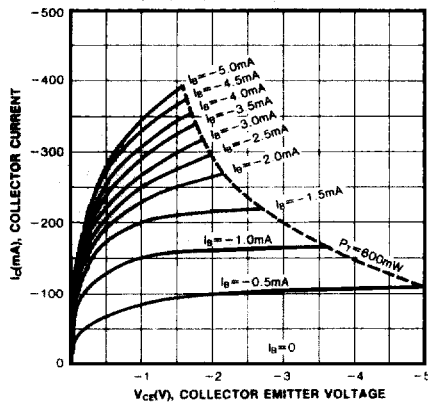
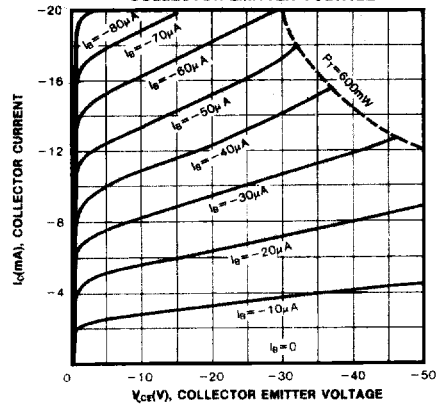
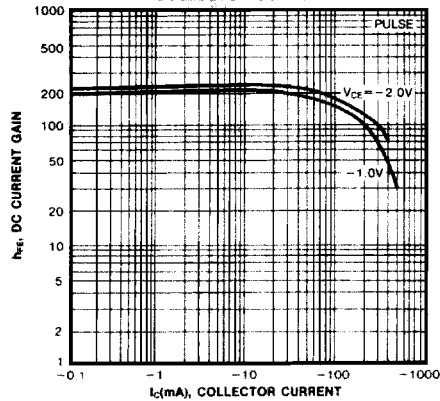
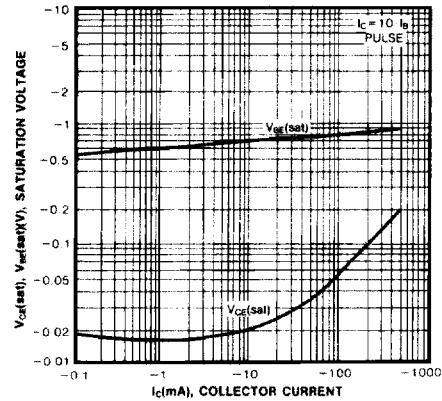
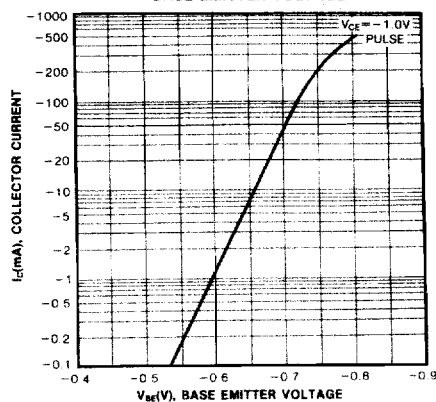
1. Collector 2. Base 3. Emitter

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

Characteristic	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector Emitter Breakdown Voltage	BV_{CEO}	$I_C = -10\text{mA}, I_B = 0$	-45			V
:BC327			-25			V
:BC328						
Collector Emitter Breakdown Voltage	BV_{CES}	$I_C = -0.1\text{mA}, I_B = 0$	-50			V
:BC327			-30			V
:BC328			-5			V
Emitter Base Breakdown Voltage	BV_{EBO}	$I_E = -10\text{mA}, I_C = 0$				V
Collector Cut-off Current	I_{CES}	$V_{CE} = -45\text{V}, I_B = 0$		-2	-100	nA
:BC307		$V_{CE} = -25\text{V}, I_B = 0$		-2	-100	nA
:BC338		$V_{CE} = -1\text{V}, I_C = -100\text{mA}$	100		630	
DC Current Gain	h_{FE}	$V_{CE} = -1\text{V}, I_C = -30\text{mA}$	60			
	h_{FE2}	$I_C = -500\text{mA}, I_B = -50\text{mA}$			-0.7	V
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$V_{CE} = -1\text{V}, I_C = -300\text{mA}$			-1.2	V
Base Emitter On Voltage	$V_{BE(on)}$	$V_{CE} = -5\text{V}, I_C = -10\text{mA}$		100		MHz
Current Gain Bandwidth Product	f_T					
Collector Base Capacitance	C_{CBO}	$V_{CB} = -10\text{V}, f = 1\text{MHz}$		12		pF

 h_{FE} CLASSIFICATION

Classification	A	B	C
h_{FE}	100-250	160-400	250-630
h_{FE2}	60-	100-	170-

COLLECTOR CURRENT vs.
COLLECTOR EMITTER VOLTAGECOLLECTOR CURRENT vs.
COLLECTOR EMITTER VOLTAGEDC CURRENT GAIN vs.
COLLECTOR CURRENTBASE AND COLLECTOR SATURATION
VOLTAGE vs. COLLECTOR CURRENTCOLLECTOR CURRENT vs.
BASE EMITTER VOLTAGEGAIN BANDWIDTH PRODUCT vs.
EMITTER CURRENT