

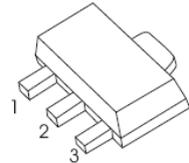
PNP Epitaxial Planar Silicon Transistors

■ Features

- High collector to emitter voltage: $V_{CE0} = -120V$.

SOT-89-3L

1. BASE
2. COLLECTOR
3. EMITTER



■ Absolute Maximum Ratings $T_a = 25^\circ C$

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	-120	V
Collector-emitter voltage	V_{CEO}	-120	V
Emitter-base voltage	V_{EBO}	-5	V
Collector current	I_C	-0.7	A
Collector current (pulse) *1	$I_{C(pu)}$	-1.2	A
Collector power dissipation	P_c	2	W
Junction temperature	T_j	150	$^\circ C$
Storage temperature	T_{stg}	-55 to +150	$^\circ C$

*1. $PW \leq 10ms$, duty cycle $\leq 50\%$

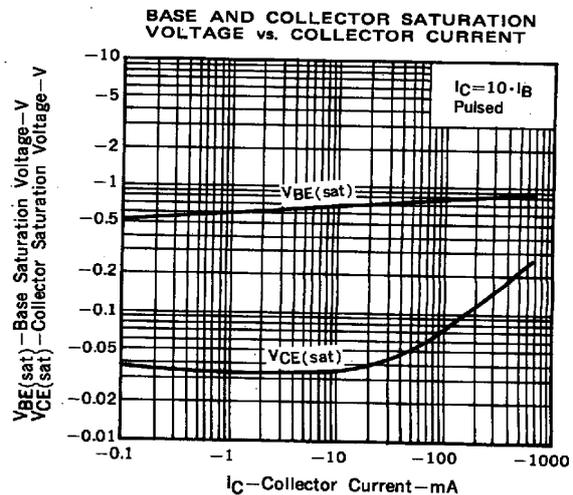
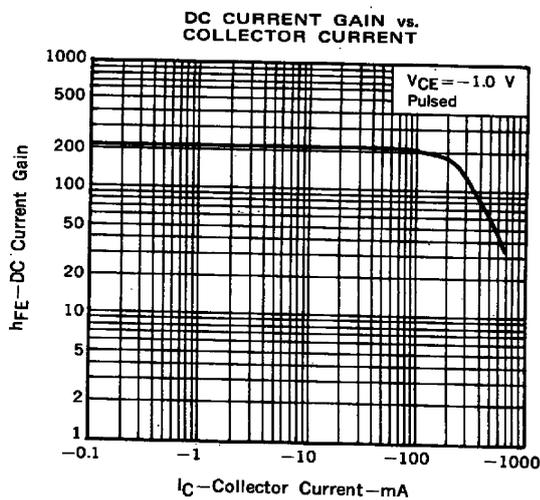
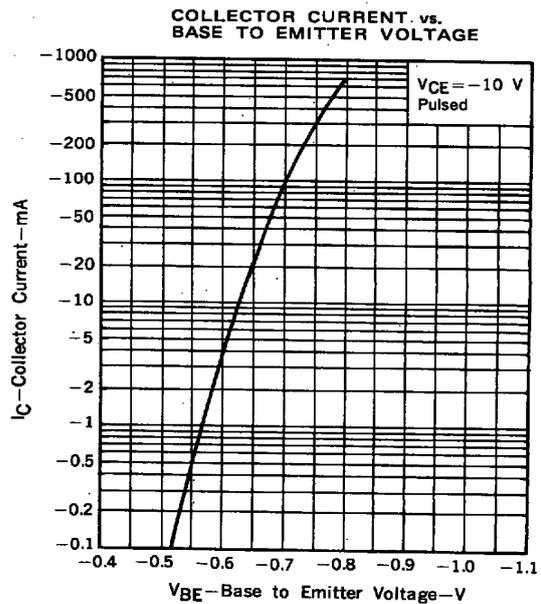
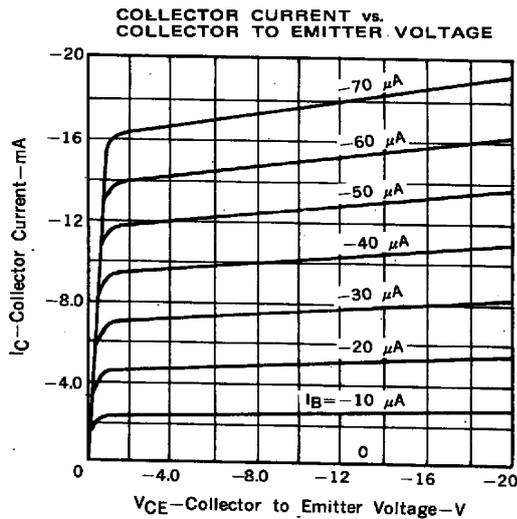
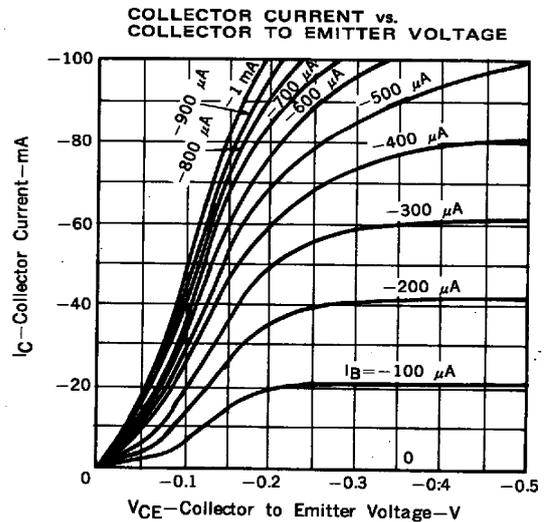
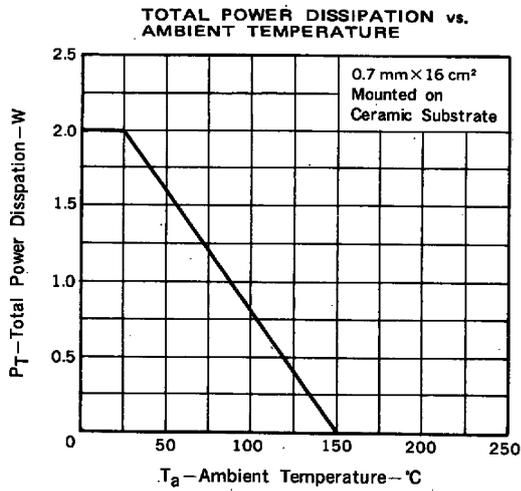
■ Electrical Characteristics $T_a = 25^\circ C$

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V_{CBO}	$I_C = -100 \mu A, I_E = 0$	-120			V
Collector- emitter breakdown voltage	V_{CEO}	$I_C = -1 mA, I_B = 0$	-120			
Emitter - base breakdown voltage	V_{EBO}	$I_E = -100 \mu A, I_C = 0$	-5			
Collector-base cut-off current	I_{CBO}	$V_{CB} = -120 V, I_E = 0$			-0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = -5V, I_C = 0$			-0.1	
Collector-emitter saturation voltage *	$V_{CE(sat)}$	$I_C = -500 mA, I_B = -50mA$			-0.6	V
Base - emitter saturation voltage *	$V_{BE(sat)}$	$I_C = -500 mA, I_B = -50mA$			-1.5	
Base - emitter voltage *	V_{BE}	$V_{CE} = -10V, I_C = -10mA$	-0.55		-0.68	
DC current gain *	h_{FE}	$V_{CE} = -1V, I_C = -100mA$	90	200	400	
		$V_{CE} = -1V, I_C = -5mA$	45	200		
Collector output capacitance	C_{ob}	$V_{CB} = -10V, I_E = 0, f = 1MHz$		14		μF
Transition frequency	f_T	$V_{CE} = -10V, I_C = -10mA$		75		MHz

* $PW \leq 350\mu s$, duty cycle $\leq 2\%$

■ h_{FE} Classification(1)

Type	2SB806-R	2SB806-Q	2SB806-P
Range	90-180	135-270	200-400
Marking	KR	KQ	KP

Typical Characteristics


■ Typical Characteristics

