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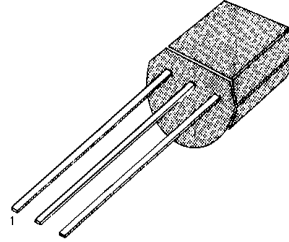
PNP EPITAXIAL SILICON TRANSISTOR

HIGH VOLTAGE TRANSISTOR

ABSOLUTE MAXIMUM RATINGS (T_A=25°C)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V _{CB0}	-350	V
Collector-Emitter Voltage	V _{CEO}	-350	V
Emitter-Base Voltage	V _{EBO}	-5	V
Collector Current	I _C	-500	mA
Base Current	I _B	-250	mA
Collector Dissipation	P _C	0.625	W
Derate above 25		5	mW/°C
Junction Temperature	T _J	50	°C
Storage Temperature	T _{STG}	-55 ~ 150	°C

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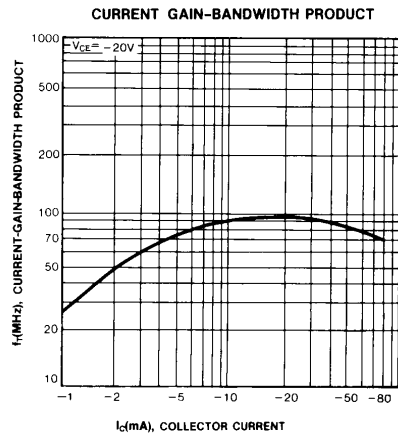
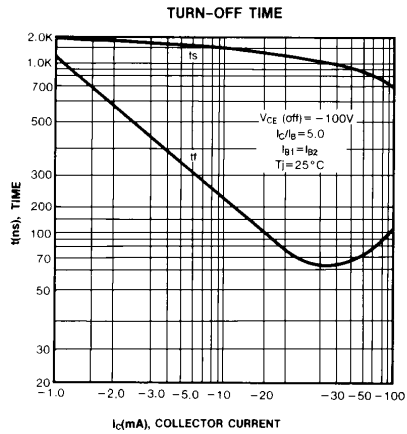
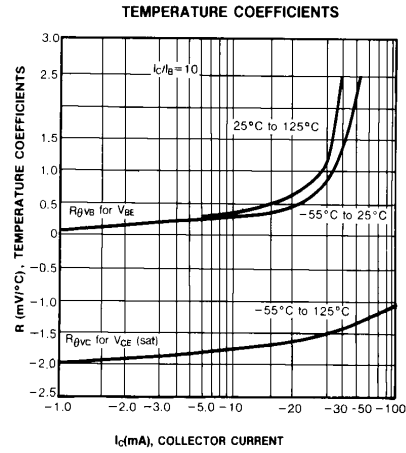
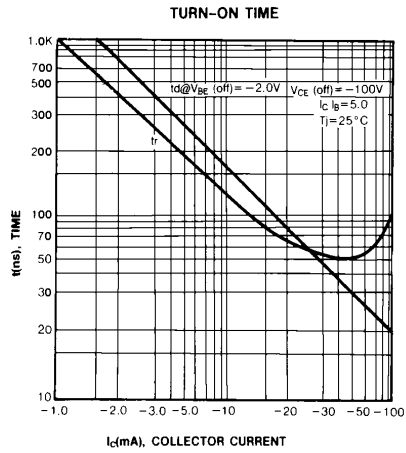
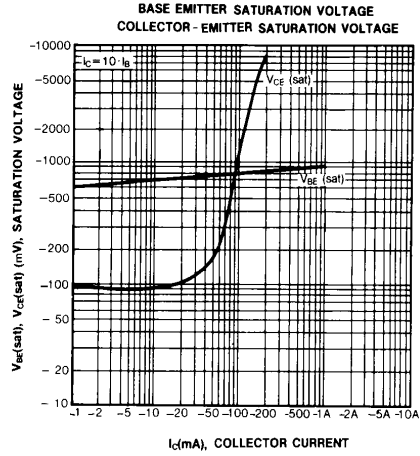
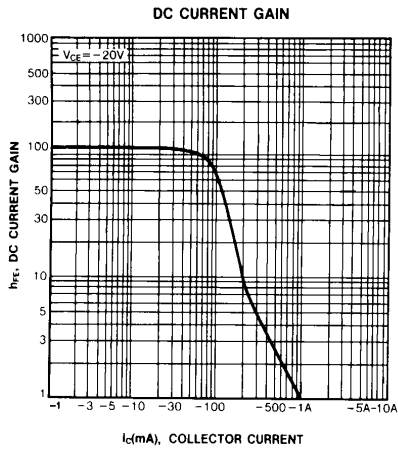


1. Emitter 2. Base 3. Collector

ELECTRICAL CHARACTERISTICS (T_A=25°C)

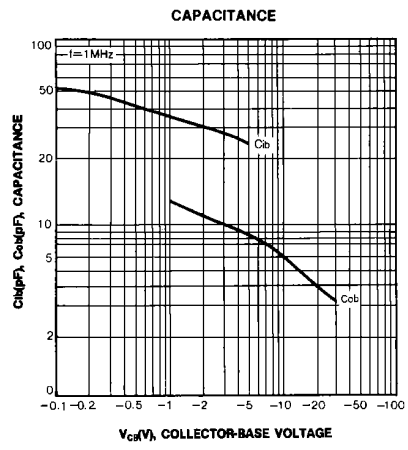
Characteristic	Symbol	Test Conditions	Min	Max	Unit
Collector-Base Breakdown Voltage	BV _{CB0}	I _C = -100μA, I _E =0	-350		V
* Collector-Emitter Breakdown Voltage	BV _{CEO}	I _C = -1mA, I _B =0	-350		V
Emitter-Base Breakdown Voltage	BV _{EBO}	I _E = -10μA, I _C =0	-5		V
Collector Cut-off Current	I _{CBO}	V _{CB} = -250V, I _E =0		-50	nA
Emitter Cut-off Current	I _{EBO}	V _{EB} = -4V, I _C =0		-50	nA
* DC Current Gain	h _{FE}	V _{CE} = -10V, I _C = -1mA	20		
		V _{CE} = -10V, I _C = -10mA	30		
		V _{CE} = -10V, I _C = -30mA	30	200	
		V _{CE} = -10V, I _C = -50mA	20	200	
		V _{CE} = -10V, I _C = -100mA	15		
Collector-Emitter Saturation Voltage	V _{CE (sat)}	I _C = -10mA, I _B = -1mA		-0.30	V
		I _C = -20mA, I _B = -2mA		-0.35	V
		I _C = -30mA, I _B = -3mA		-0.50	V
		I _C = -50mA, I _B = -5mA		-1	V
Base-Emitter Saturation Voltage	V _{BE (sat)}	I _C = -10mA, I _B = -1mA		-0.75	V
		I _C = -20mA, I _B = -2mA		-0.85	V
		I _C = -30mA, I _B = -3mA		-0.90	V
Base-Emitter On Voltage	V _{BE (on)}	V _{CE} = -10V, I _C = -100mA		-2	V
* Current Gain Bandwidth Product	f _T	V _{CE} = -20V, I _C = -10mA	40	200	MHz
Collector-Base Capacitance	C _{CB}	V _{CB} = -20V, I _E =0, f=1MHz		6	pF
Emitter-Base Capacitance	C _{EB}	V _{EB} = -0.5V, I _C =0, f=1MHz		100	pF
Turn On Time	T _{ON}	V _{BE (off)} = -2V, V _{CC} = -100V I _C = -50mA, I _{B1} = -10mA		200	ns
Turn Off Time	T _{OFF}	V _{CC} = -100V, I _C = -50mA I _{B1} = I _{B2} = 10mA		3.5	ns

* Pulse Test: Pulse Width ≤ 300μs, Duty Cycle ≤ 2%



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