

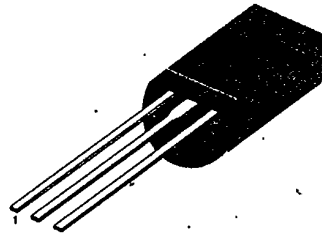
KSC2310**NPN EPITAXIAL SILICON TRANSISTOR****HIGH VOLTAGE POWER AMPLIFIER**

- Collector — Base Voltage $V_{CBO} = 200V$
- Current Gain-Bandwidth Product $f_T = 100MHz$ (Typ)

ABSOLUTE MAXIMUM RATINGS ($T_a = 25^\circ C$)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V_{CBO}	200	V
Collector-Emitter Voltage	V_{CEO}	150	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	I_C	50	mA
Collector Dissipation	P_C	800	mW
Junction Temperature	T_J	150	$^\circ C$
Storage Temperature	T_{stg}	-55 ~ +150	$^\circ C$

TO-92L



1. Emitter 2. Collector 3. Base

ELECTRICAL CHARACTERISTICS ($T_a = 25^\circ C$)

Characteristic	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector-Base Breakdown Voltage	BV_{CBO}	$I_C = 100\mu A, I_E = 0$	200			V
Collector-Emitter Breakdown Voltage	BV_{CEO}	$I_C = 5mA, I_B = 0$	150			V
Emitter-Base Breakdown Voltage	BV_{EBO}	$I_E = -100\mu A, I_C = 0$	5			V
Collector Cut-off Current	I_{CBO}	$V_{CB} = 200V, I_E = 0$			0.1	μA
DC Current Gain	h_{FE}	$V_{CE} = 5V, I_C = 10mA$	40		240	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 10mA, I_B = 1mA$			0.5	V
Current Gain-Bandwidth Product	f_T	$V_{CE} = 30V, I_C = 10mA$		100		MHz
Output Capacitance	C_{ob}	$V_{CB} = 10V, I_E = 0$ $f = 1kHz$		3.5	5	pF

 h_{FE} CLASSIFICATION

Classification	R	O	Y
h_{FE}	40-80	70-140	120-240

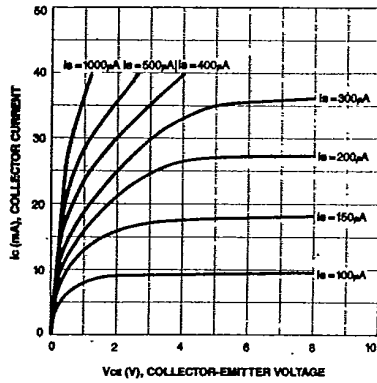


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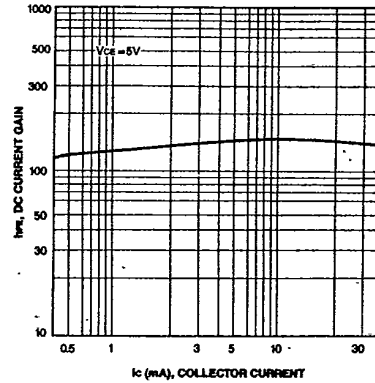
NPN EPITAXIAL SILICON TRANSISTOR

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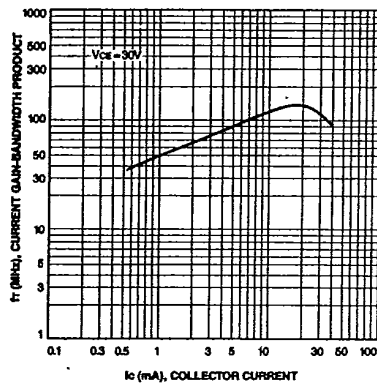
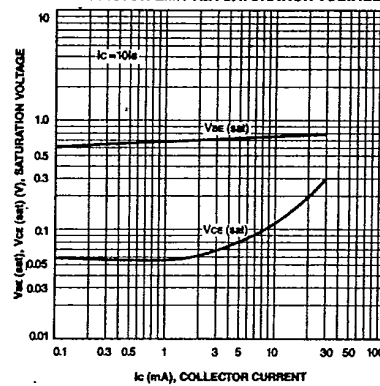
STATIC CHARACTERISTIC



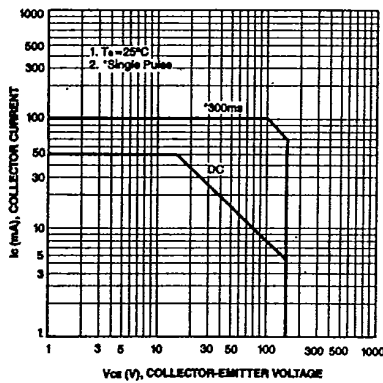
DC CURRENT GAIN



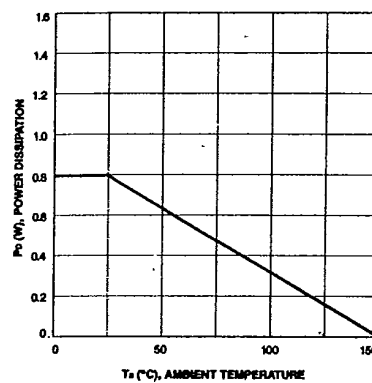
CURRENT GAIN-BANDWIDTH PRODUCT

BASE-EMITTER SATURATION VOLTAGE
COLLECTOR-EMITTER SATURATION VOLTAGE

SAFE OPERATING AREA



POWER DERATING



3

