

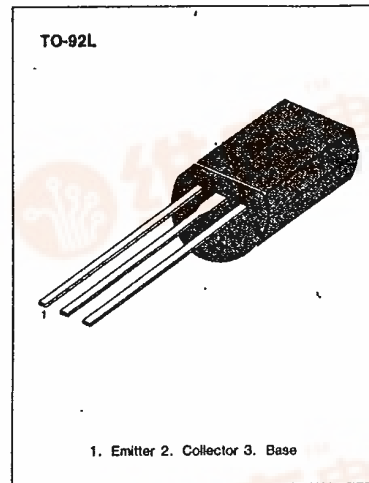
SAMSUNG SEMICONDUCTOR INC 14E D 7964142 0006922 T T-3/-2.3
KSC2330 NPN EPITAXIAL SILICON TRANSISTOR

COLOR TV CHROMA OUTPUT

- Collector-Base Voltage $V_{CB0} = 300V$
- Current Gain-Bandwidth Product $f_T = 50MHz$ (Typ)

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

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V_{CB0}	300	V
Collector-Emitter Voltage	V_{CEO}	300	V
Emitter-Base Voltage	V_{EBO}	7	V
Collector Current	I_C	100	mA
Collector Dissipation	P_C	1	W
Junction Temperature	T_J	150	$^\circ C$
Storage Temperature	T_{stg}	-55 ~ +150	$^\circ C$



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

Characteristic	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector-Base Breakdown Voltage	BV_{CB0}	$I_C = 100\mu A, I_E = 0$	300			V
Collector-Emitter Breakdown Voltage	BV_{CEO}	$I_C = 5mA, I_B = 0$	300			V
Emitter-Base Breakdown Voltage	BV_{EBO}	$I_E = -100\mu A, I_C = 0$	7			V
Collector Cut-off Current	I_{CBO}	$V_{CB} = 200V, I_E = 0$			0.1	μA
DC Current Gain	h_{FE}	$V_{CE} = 10V, I_C = 20mA$	40		240	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 10mA, I_B = 1mA$			0.5	V
Current Gain-Bandwidth Product	f_T	$V_{CE} = 30V, I_C = 10mA$		50		MHz
Output Capacitance	C_{ob}	$V_{CB} = 10V, I_E = 0$ $f = 1MHz$		4		pF

h_{FE} CLASSIFICATION

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

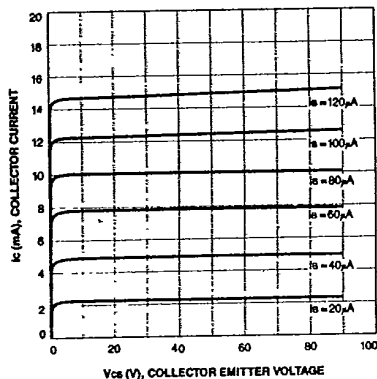


SAMSUNG SEMICONDUCTOR

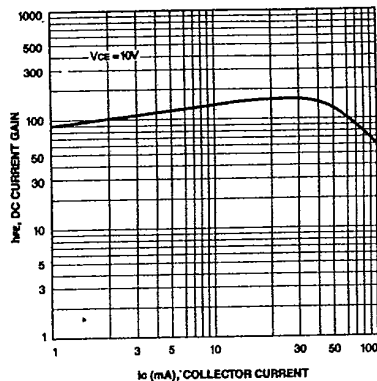
KSC2330

NPN EPITAXIAL SILICON TRANSISTOR

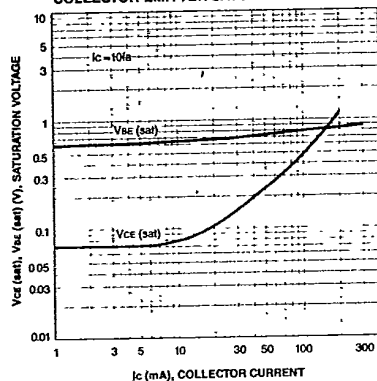
STATIC CHARACTERISTIC



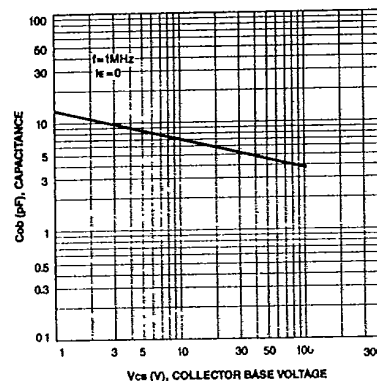
DC CURRENT GAIN



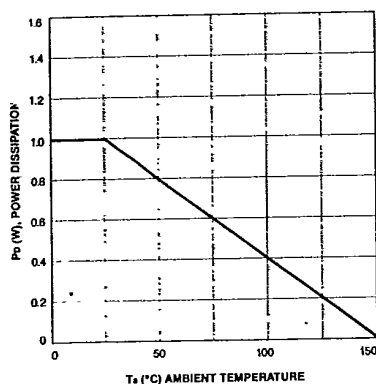
BASE-EMITTER SATURATION VOLTAGE
COLLECTOR-EMITTER SATURATION VOLTAGE



COLLECTOR OUTPUT CAPACITANCE



POWER DERATING



3

