

KSC2330

NPN EPITAXIAL SILICON TRANSISTOR

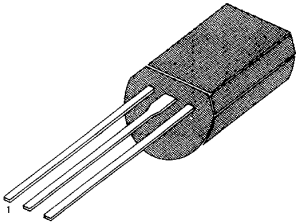
COLOR TV CHROMA OUTPUT

- Collector-Base Voltage V_{CBO} =300V
- Current Gain-Bandwidth Product f_T =50MHz (TYP)

ABSOLUTE MAXIMUM RATINGS (T_A =25°C)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V_{CBO}	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	mW
Junction Temperature	T_J	150	°C
Storage Temperature	T_{STG}	-55 ~ +150	°C

TO-92L



1. Emitter 2. Collector 3. Base

ELECTRICAL CHARACTERISTICS (T_A =25°C)

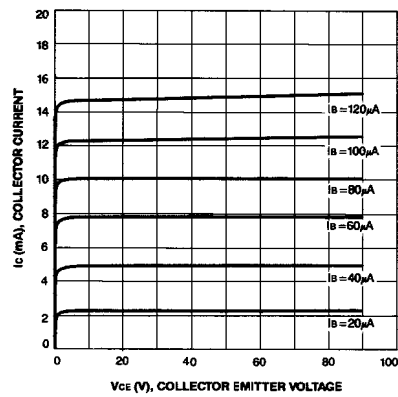
Characteristic	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector-Base Breakdown Voltage	BV_{CBO}	$I_C=100\mu A, I_E=0$	300			V
Collector-Emitter Breakdown Voltage	BV_{CEO}	$I_C=5mA, I_B=0$	300			V
Emitter-Base Breakdown Voltage	BV_{EBO}	$I_E=100\mu A, I_C=0$	7			V
Collector Cut-off Current	I_{CBO}	$V_{CB}=200V, I_E=0$			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

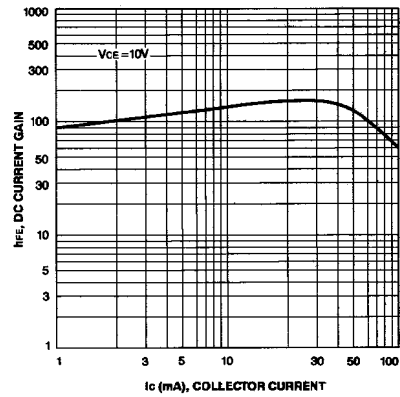
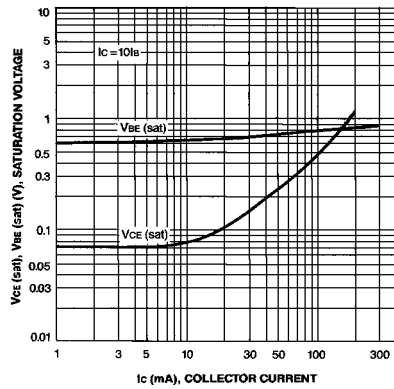
Classification	R	O	Y
h_{FE}	40-80	100-200	160-320



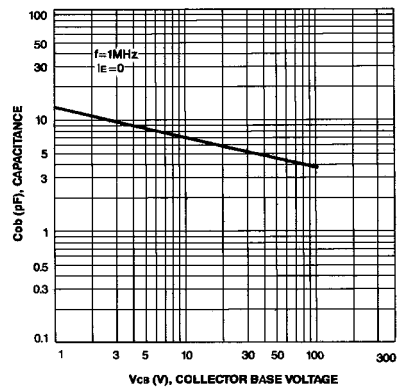
STATIC CHARACTERISTIC



DC CURRENT GAIN

BASE-EMITTER SATURATION VOLTAGE
COLLECTOR-EMITTER SATURATION VOLTAGE

COLLECTOR OUTPUT CAPACITANCE



POWER DERATING

