

**KSC2715**

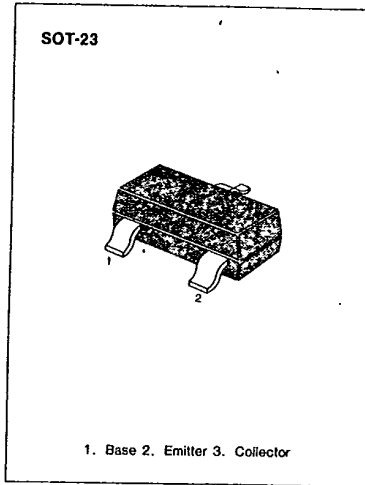
**NPN EPITAXIAL SILICON TRANSISTOR**

FM RADIO AMP, MIX, CONV OSC, IF AMP

• High Power Gain  $G_{pe}=30dB$

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

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	$V_{CBO}$	35	V
Collector-Emitter Voltage	$V_{CEO}$	30	V
Emitter-Base Voltage	$V_{EBO}$	4	V
Collector Current	$I_C$	50	mA
Collector Dissipation	$P_C$	150	mW
Junction Temperature	$T_J$	150	$^\circ C$
Storage Temperature	$T_{stg}$	-55 - 150	$^\circ C$



**3**

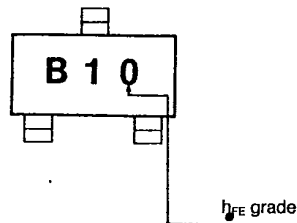
**ELECTRICAL CHARACTERISTICS ( $T_a=25^\circ C$ )**

Characteristic	Symbol	Test Condition	Min	Typ	Max	Unit
Collector Cutoff Current	$I_{CBO}$	$V_{CB}=35V, I_E=0$			0.1	$\mu A$
Emitter Cutoff Current	$I_{EBO}$	$V_{EB}=4V, I_C=0$			1	$\mu A$
DC Current Gain	$h_{FE}$	$V_{CE}=12V, I_C=2mA$	40		240	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=10mA, I_B=1mA$			0.4	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=10mA, I_B=1mA$			1.0	V
Current Gain-Bandwidth Product	$f_T$	$I_C=1mA, V_{CE}=10V$	100		400	MHz
Output Capacitance	$C_{ob}$	$V_{CB}=10V, I_E=0$ $f=1MHz$		2.	3.2	pF
Power Gain	$G_{pe}$	$V_{CE}=6V, I_E=-1mA$ $f=10.7MHz$	27	30	33	dB

**$h_{FE}$  CLASSIFICATION**

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

Marking

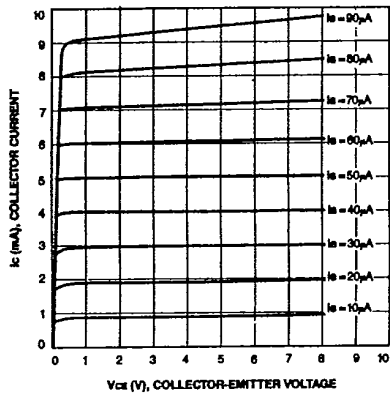


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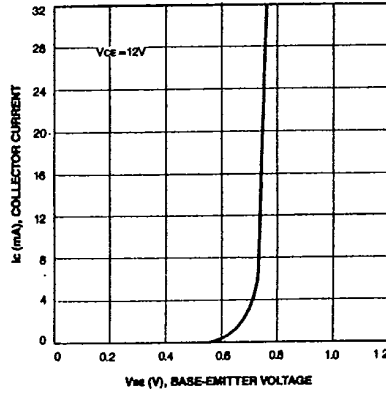
NPN EPITAXIAL SILICON TRANSISTOR

T-31-15

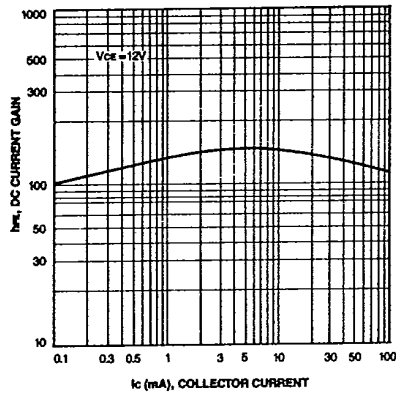
STATIC CHARACTERISTIC



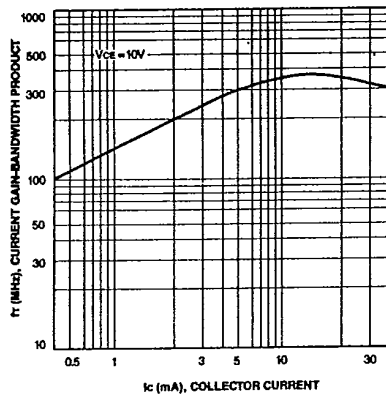
BASE-EMITTER ON VOLTAGE



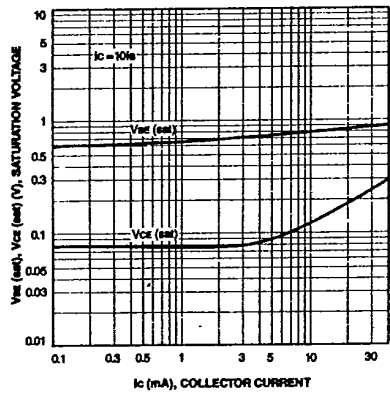
DC CURRENT GAIN



CURRENT GAIN-BANDWIDTH PRODUCT



BASE-EMITTER SATURATION VOLTAGE  
COLLECTOR-EMITTER SATURATION VOLTAGE



COLLECTOR OUTPUT CAPACITANCE

