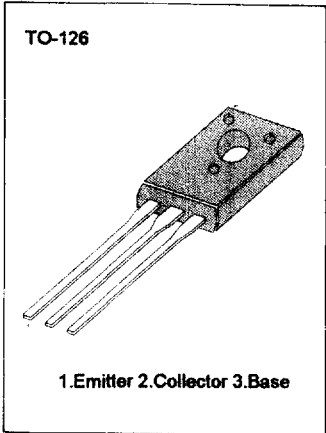


AUDIO FREQUENCY, HIGH FREQUENCY
POWER AMPLIFIER

• Complement to KSA1220/KSA1220A

ABSOLUTE MAXIMUM RATINGS

Characteristic	Symbol	Rating	Unit
Collector- Base Voltage :KSC2690	V_{CBO}	120	V
: KSC2690A		160	V
Collector-Emitter Voltage : KSC2690	V_{CEO}	120	V
: KSC2690A		160	V
Emitter- Base Voltage	V_{EBO}	5	V
Collector Current (DC)	I_C	1.2	A
*Collector Current (Pulse)	I_C	2.5	A
Base Current(DC)	I_B	0.3	A
Collector Dissipation ($T_A=25^{\circ}C$)	P_C	1.2	W
Collector Dissipation ($T_C=25^{\circ}C$)	P_C	20	W
Junction Temperature	T_J	150	$^{\circ}C$
Storage Temperature	T_{STG}	-55 ~ 150	$^{\circ}C$



* $PW \leq 10ms$, Duty Cycle $\leq 50\%$

ELECTRICAL CHARACTERISTICS ($T_C=25^{\circ}C$)

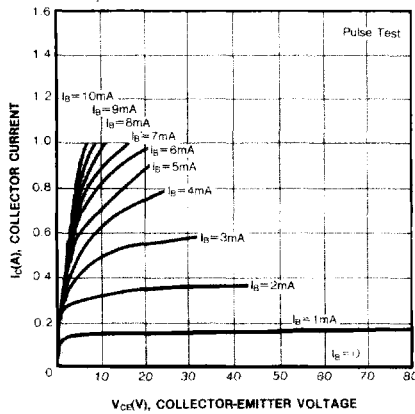
Characteristic	Symbol	Test Condition	Min	Typ	Max	Unit
Collector Cutoff Current	I_{CBO}	$V_{CB} = 120V, I_E = 0$			1	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = 3V, I_C = 0$			1	μA
* DC Current Gain	h_{FE1}	$V_{CE} = 5V, I_C = 5mA$	35	105		
	h_{FE2}	$V_{CE} = 5V, I_C = 0.3A$	60	140	320	
* Collector Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 1A, I_B = 0.2A$		0.4	0.7	V
* Base Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = 1A, I_B = 0.2A$		1	1.3	V
Current Gain Bandwidth Product	f_T	$V_{CE} = 5V, I_E = 0.2A$		155		MHz
Output Capacitance	C_{OB}	$V_{CB} = 10V, I_E = 0, f = 1MHz$		19		pF

* Pulse Test : $p_w \leq 350\mu s$, Duty Cycle $\leq 2\%$ Pulsed

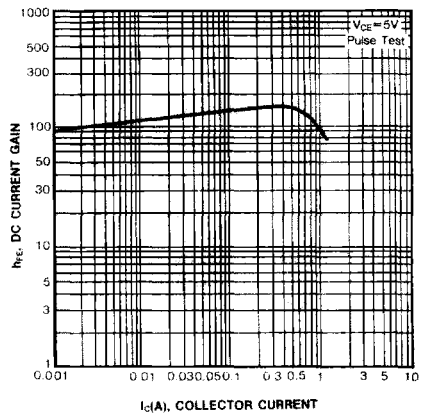
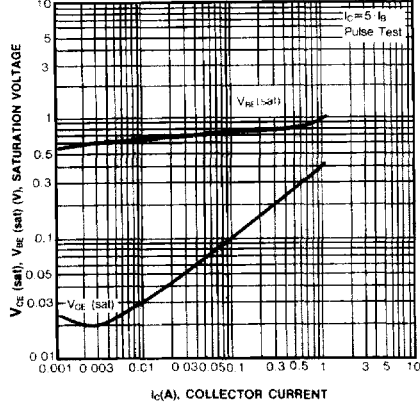
$h_{FE}(2)$ CLASSIFICATION

Classification	R	O	Y
$h_{FE}(2)$	60 - 120	100 - 200	160 - 320

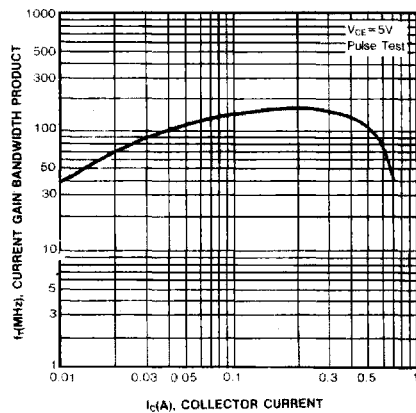
STATIC CHARACTERISTIC



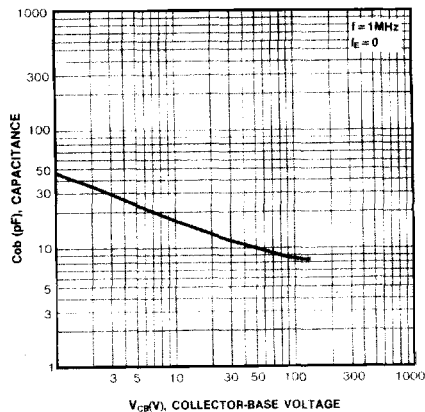
DC CURRENT GAIN

BASE-EMITTER SATURATION VOLTAGE
COLLECTOR-EMITTER SATURATION VOLTAGE

CURRENT GAIN-BANDWIDTH PRODUCT



COLLECTOR OUTPUT CAPACITANCE



DERATING CURVE OF SAFE OPERATING AREAS

