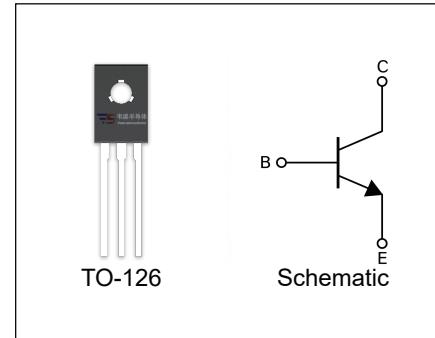


KSC2690 / KSC2690A TRANSISTOR (NPN)

FEATURES

- Audio Frequency Power Amplifier
- High Frequency Power Amplifier
- Complement to KSA1220/KSA1220A



MAXIMUM RATINGS (T_a=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	KSC2690	120
		KSC2690A	160
V_{CEO}	Collector-Emitter Voltage	KSC2690	120
		KSC2690A	160
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current (DC)	1.2	A
I_{CP}	Collector Current (PW ≤10ms,Duty Cycle ≤2 %)	2.5	A
I_B	Base Current	0.3	A
P_C	Collector Power Dissipation (T _a = 25 °C)	1.25	W
	Collector Power Dissipation (T _c = 25 °C)	20	W
T_J,T_{stg}	Operation Junction and Storage Temperature Range	-55-150	°C

ELECTRICAL CHARACTERISTICS

$T_a=25^{\circ}\text{C}$ unless otherwise specified

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector cut-off current	I_{CBO}	$V_{CB}=120\text{V}$, $I_E=0$			1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=3\text{V}$, $I_C=0$			1	μA
DC current gain	$h_{FE(1)}$	$V_{CE}=5\text{V}$, $I_C=5\text{mA}$	35	105		
	$h_{FE(2)}$	$V_{CE}=5\text{V}$, $I_C=300\text{mA}$	60	140	320	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=1\text{A}$, $I_B=200\text{mA}^{(1)}$		0.4	0.7	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C=1\text{A}$, $I_B=200\text{mA}^{(1)}$		1	1.3	V
Transition frequency	f_T	$V_{CE}=5\text{V}$, $I_C=200\text{mA}$		155		MHz
Collector output capacitance	C_{ob}	$V_{CB}=10\text{V}$, $I_E=0$, $f=1\text{MHz}$		19		pF

⁽¹⁾ Pulse Test : $PW \leq 350\text{us}$, Duty Cycle $\leq 2\%$

CLASSIFICATION OF $h_{FE(2)}$

Rank	R	O	Y
Range	60-120	100-200	160-320