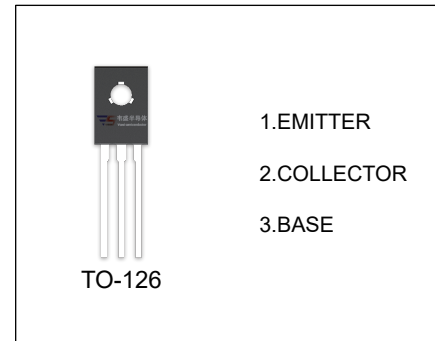


KSC2690 / KSC2690A TRANSISTOR (NPN)

FEATURES

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



ORDERING INFORMATION

Part Number	Package	Packing Method	Pack Quantity
KSC2690	TO-126	Bulk	200pcs/Bag
KSC2690A	TO-126	Bulk	200pcs/Bag
KSC2690-TU	TO-126	Tube	60pcs/Tube
KSC2690A-TU	TO-126	Tube	60pcs/Tube

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

Symbol	Parameter	Value	Unit	
V _{CBO}	Collector-Base Voltage	KSC2690	120	V
		KSC2690A	160	V
V _{CEO}	Collector-Emitter Voltage	KSC2690	120	V
		KSC2690A	160	V
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	

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

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

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

CLASSIFICATION OF $h_{FE(2)}$

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