

2SA699, 2SA699A

Silicon PNP Epitaxial Planar Type

Power Amplifier

Complementary Pair with 2SC1226, 2SC1226A

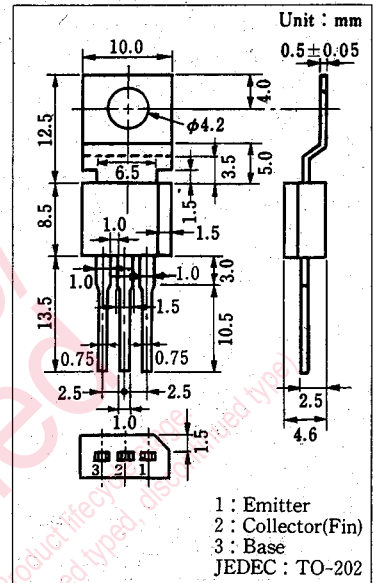
■ Feature

- 5W output in complementary pair with 2SC1226, 2SC1226A

■ Absolute Maximum Ratings (Ta=25°C)

Item	Symbol	Value	Unit
Collector-base voltage	2SA699	-40	V
	2SA699A	-50	
Collector-emitter voltage	2SA699	-32	V
	2SA699A	-40	
Emitter-base voltage	V _{EBO}	-5	V
Peak collector current	I _{CP}	-3	A
Base current	I _B	-0.6	A
Collector power dissipation (Tc=25°C)	P _C	10	W
Junction temperature	T _j	150	°C
Storage temperature	T _{stg}	-55 ~ +150	°C

■ Package Dimensions

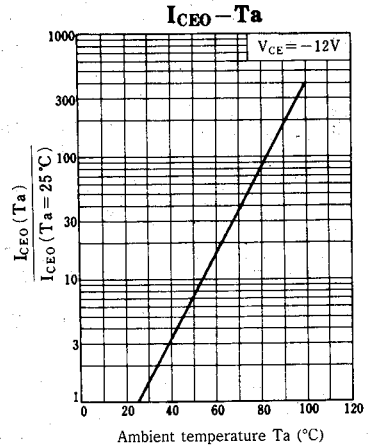
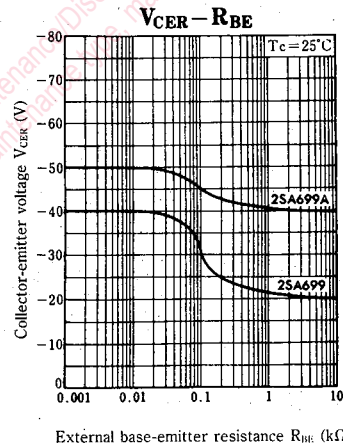
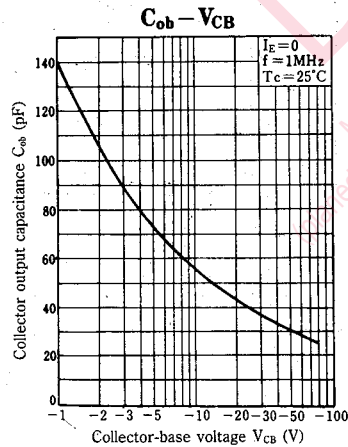
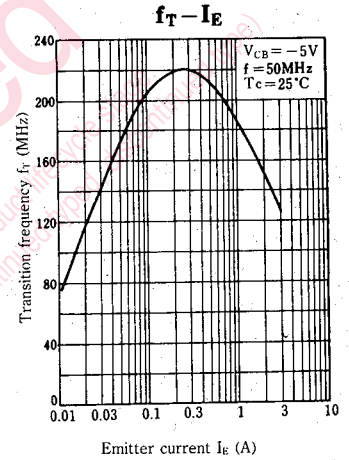
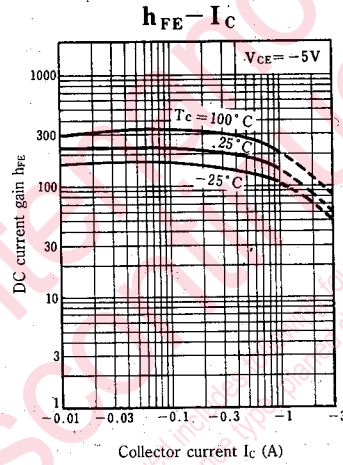
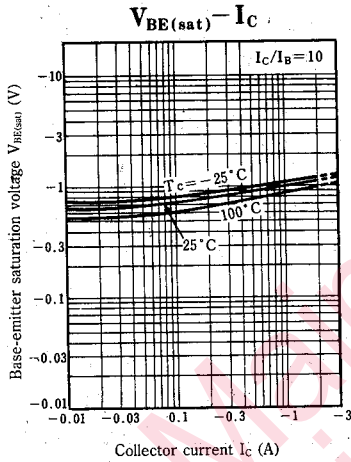
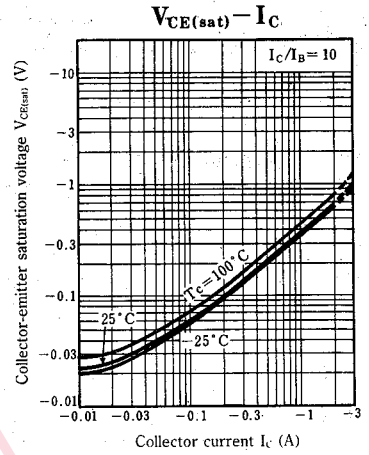
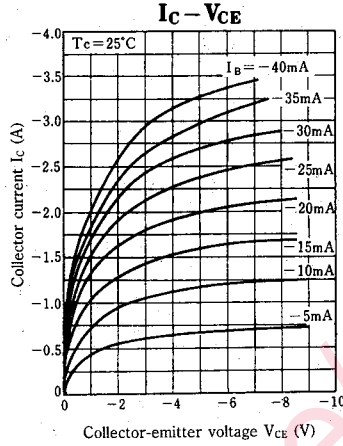
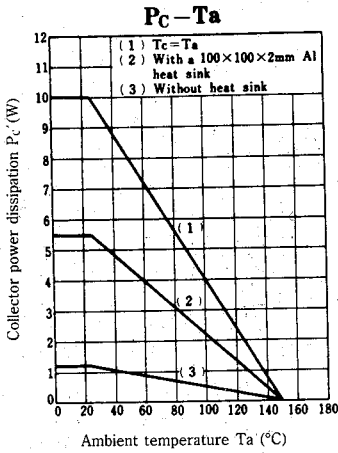


■ Electrical Characteristics (Tc=25°C)

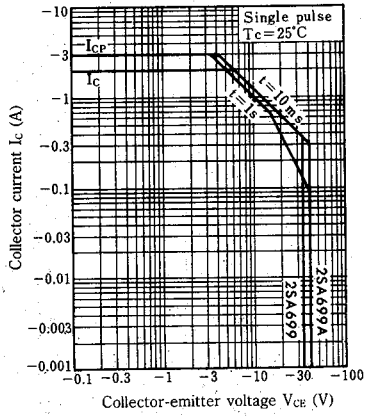
Item	Symbol	Condition	min.	typ.	max.	Unit
Collector cutoff current	I _{CBO}	V _{CB} = -20 V, I _E = 0			-1	μA
	I _{CEO}	V _{CE} = -12 V, I _B = 0			-100	
Emitter cutoff current	I _{EBO}	V _{EB} = -5 V, I _C = 0			-100	μA
Collector-base voltage	2SA699	I _C = -1 mA, I _E = 0	-40			V
	2SA699A		-50			
Collector-emitter voltage	2SA699	I _C = -10 mA, I _B = 0	-32			V
	2SA699A		-40			
DC current gain	h _{FE} *	V _{CE} = -5 V, I _C = -1 A	50		220	
Collector-emitter saturation voltage	V _{CE(sat)}	I _C = -1.5A, I _B = -0.15A		-0.4	-1	V
Base-emitter saturation voltage	V _{BE(sat)}	I _C = -2A, I _B = -0.2A			-1.5	V
Transition frequency	f _T	V _{CB} = -5V, I _E = 0.5A, f = 200MHz		150		MHz
Collector output capacitance	C _{ob}	V _{CB} = -5 V, I _E = 0, f = 1 MHz		70		pF

*h_{FE} Classifications

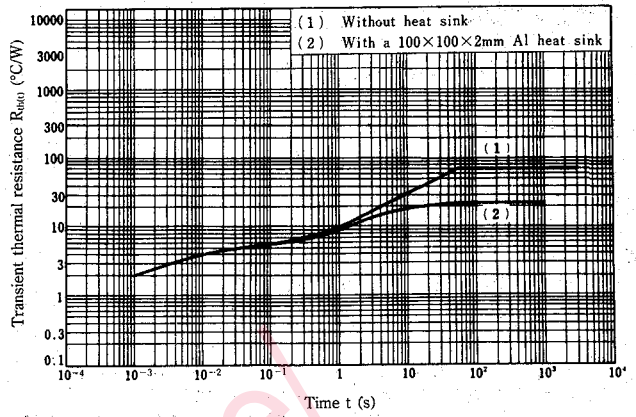
Class	P	Q	R
h _{FE}	50~100	80~160	100~220



Area of safe operation (ASO)



$R_{th}(t) - t$



Maintenance Discontinued

Maintenance/Discontinued includes following four Product lifecycle stage.
 (planned maintenance type, maintenance type, planned discontinued type, discontinued type)

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