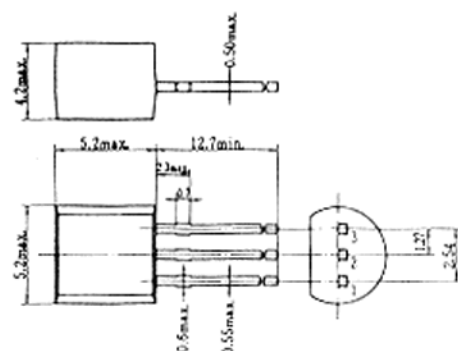


2SC1890, 2SC1890A

SILICON NPN EPITAXIAL

LOW FREQUENCY HIGH VOLTAGE AMPLIFIER

Complementary pair with 2SA893/A



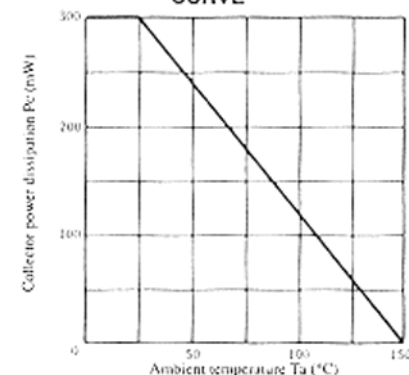
(JEDEC TO-92)

1. Emitter
 2. Collector
 3. Base
- (Dimensions in mm)

■ ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

Item	Symbol	2SC1890	2SC1890A	Unit
Collector to base voltage	V _{CB0}	90	120	V
Collector to emitter voltage	V _{CE0}	90	120	V
Emitter to base voltage	V _{EB0}	5	5	V
Collector current	I _C	50	50	mA
Collector power dissipation	P _C	300	300	mW
Junction temperature	T _j	150	150	°C
Storage temperature	T _{stg}	-55 to +150	-55 to +150	°C

MAXIMUM COLLECTOR DISSIPATION CURVE



■ ELECTRICAL CHARACTERISTICS (Ta=25°C)

Item	Symbol	Test Condition	2SC1890			2SC1890A			Unit
			min.	typ.	max.	min.	typ.	max.	
Collector to emitter breakdown voltage	V _{(BR)CEO}	I _C = 1mA, R _{BE} = ∞	90	—	—	120	—	—	V
Collector cutoff current	I _{CEO}	V _{CB} = 75V, I _E = 0	—	—	0.5	—	—	—	μA
		V _{CB} = 100V, I _E = 0	—	—	—	—	—	0.5	
DC current transfer ratio	h _{FE} *	V _{CE} = 12V, I _C = 2mA	250	—	1200	250	—	1200	
Base to emitter voltage	V _{BE}	V _{CE} = 12V, I _C = 2mA	—	—	0.75	—	—	0.75	V
Collector to emitter saturation voltage	V _{CE(sat)}	I _C = 10mA, I _B = 1mA	—	—	0.5	—	—	0.5	V
Gain bandwidth product	f _r	V _{CE} = 12V, I _C = 2mA	—	200	—	—	200	—	MHz
Collector output capacitance	C _{ob}	V _{CB} = 25V, I _E = 0, f = 1MHz	—	1.6	—	—	1.6	—	pF
Noise figure	NF	V _{CE} = 6V, I _C = 50μA, R _G = 50kΩ, f = 1kHz	—	2	10	—	2	10	dB

* The 2SC1890A is grouped by h_{FE} as follows.

D	E	F
250 to 500	400 to 800	600 to 1200

■ See characteristic curves of 2SC1775 and 2SC1775A.