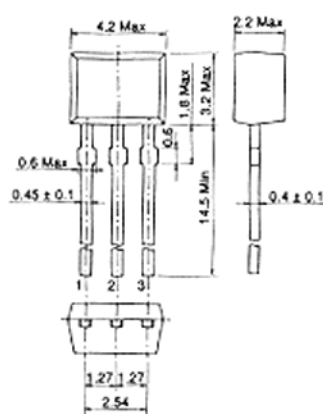


2SC3390

SILICON NPN EPITAXIAL
LOW FREQUENCY LOW NOISE
AMPLIFIER · HF AMPLIFIER



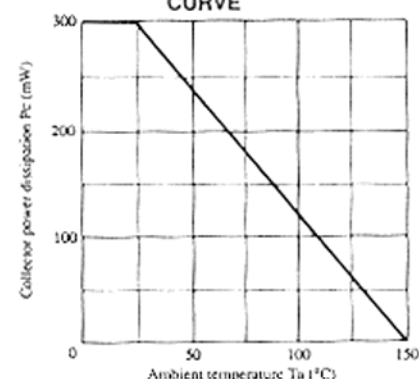
(SPAK)

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

■ ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

Item	Symbol	2SC3390	Unit
Collector to base voltage	V _{CB0}	55	V
Collector to emitter voltage	V _{CE0}	50	V
Emitter to base voltage	V _{EB0}	5	V
Collector current	I _c	100	mA
Collector power dissipation	P _c	300	mW
Junction temperature	T _j	150	°C
Storage temperature	T _{stg}	-55 to +150	°C

MAXIMUM COLLECTOR DISSIPATION CURVE



■ ELECTRICAL CHARACTERISTICS (Ta=25°C)

Item	Symbol	Test Condition	min.	typ.	max.	Unit
Collector to base breakdown voltage	V _{(BR)CBO}	I _c = 10μA, I _E = 0	55	—	—	V
Collector to emitter breakdown voltage	V _{(BR)CEO}	I _c = 1mA, R _{BE} = ∞	50	—	—	V
Emitter to base breakdown voltage	V _{(BR)EBO}	I _E = 10μA, I _c = 0	5	—	—	V
Collector cutoff current	I _{CB0}	V _{CB} = 18V, I _E = 0	—	—	0.5	μA
Emitter cutoff current	I _{EBO}	V _{EB} = 2V, I _c = 0	—	—	0.5	μA
DC current transfer ratio	h _{FE} *	V _{CE} = 12V, I _c = 2mA	100	—	320	
Base to emitter voltage	V _{BE}	V _{CE} = 12V, I _c = 2mA	—	—	0.75	V
Collector to emitter saturation voltage	V _{CE(sat)}	I _c = 10mA, I _B = 1mA	—	—	0.2	V
Gain bandwidth product	f _t	V _{CE} = 12V, I _c = 2mA	—	200	—	MHz
Collector output capacitance	C _{ob}	V _{CB} = 10V, I _E = 0, f = 1MHz	—	—	3.5	pF
Noise figure	NF	V _{CE} = 6V, I _c = 0.1mA, R _s = 1kΩ, f = 1kHz	—	1.0	5.0	dB

* The 2SC3390 is grouped by h_{FE} as follows.

B	C
100 to 200	160 to 320

■ See characteristic curves of 2SC458 (LG).