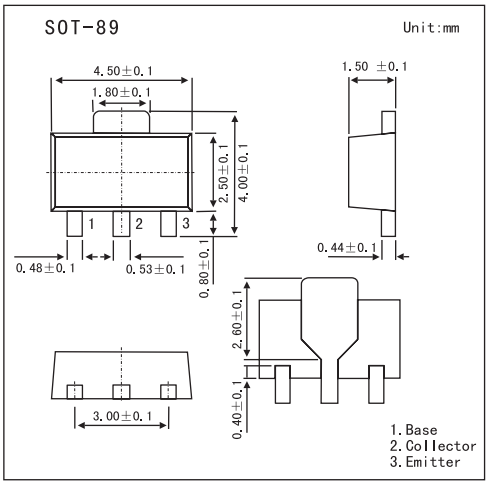
2SC4390



■ Features

- Adoption of MBIT process.
- High DC current gain (h_{FE}=800 to 3200).
- Large current capacity (I_C=2A).
- Low collector-to-emitter saturation voltage ($V_{CE(sat)}\leqslant$0.3V).
- High V_{EBO} ($V_{EBO}\geqslant$15V).

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	20	V
Collector-emitter voltage	V_{CEO}	10	V
Emitter-base voltage	V_{EBO}	15	V
Collector current	I_C	2	A
Collector current (pulse)	I_{CP}	4	A
Base current	I_B	0.4	A
Collector dissipation	P_C	500	mW
Junction temperature	T_j	150	℃
Storage temperature	T_{stg}	-55 to +150	℃

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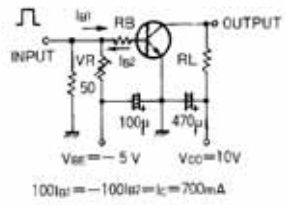
■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector cutoff current	I_{CBO}	V_{CB} = 15V, I_E=0			0.1	μA
Emitter cutoff current	I_{EBO}	V_{EB} = 10V, I_C=0			0.1	μA
DC current gain	h_{FE}	V_{CE} =2V , I_C = 500mA	800	1500	3200	
Gain bandwidth product	f_T	V_{CE} = 10V , I_C = 50mA		260		MHz
Output capacitance	C_{ob}	V_{CB} = 10V , f = 1.0MHz		280		pF
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C = 1 A , I_B = 20mA		0.11	0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	I_C = 1 A , I_B = 20mA		0.87	1.2	V
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C = 10μA , I_E = 0	20			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C = 1mA , R_{BE} = ∞	10			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E = 10μA , I_C = 0	15			V
Turn-on time	t_{on}	**Switching Time Test Circuit** PW = 20μs DC ≤ 1% 		0.13		μs
Storage time	t_{stg}			0.8		μs
Fall time	t_f			0.1		μs