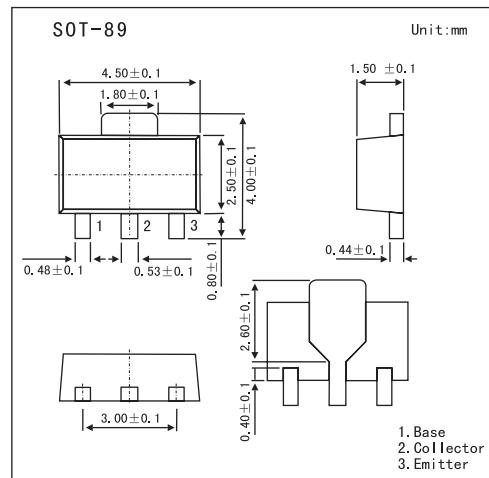


NPN Epitaxial Planar Silicon Transistor

2SC5069

■ Features

- High current capacity.
- Adoption of MBIT process.
- High DC current gain.
- Low collector-to-emitter saturation voltage.
- High V_{EBO}.



■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector-base voltage	V _{CBO}	30	V
Collector-emitter voltage	V _{C EO}	25	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 *	1.5	W
Junction temperature	T _j	150	°C
Storage temperature	T _{stg}	-55 to +150	°C

* Mounted on ceramic board(250mm²X0.8mm).

2SC5069

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector cutoff current	I _{CBO}	V _{CB} = 20 V, I _E =0			100	μA
Emitter cutoff current	I _{EBO}	V _{EB} = 10 V, I _C =0			100	μA
DC current gain	h _{FE}	V _{CE} = 5 V , I _C = 500 mA	800	1500	3200	
		V _{CE} = 5 V , I _C = 1A	600			
Gain bandwidth product	f _T	V _{CE} = 10 V , I _C = 50 mA		260		MHz
Output capacitance	C _{ob}	V _{CB} = 10V , f = 1.0MHz		27		pF
Collector-emitter saturation voltage	V _{CES(sat)}	I _C = 1A , I _B = 20 mA		0.15	0.5	V
Base-emitter saturation voltage	V _{BE(sat)}	I _C = 1A , I _B = 20 mA		0.85	1.2	V
Collector-base breakdown voltage	V _{(BR)CBO}	I _C = 10μA , I _E = 0	30			V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C = 1mA , R _{BE} = ∞	25			V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E = 10μA , I _C = 0	15			V
Turn-ON Time	t _{on}	<p>PW = 20 μs DC ≤ 1%</p> <p>100I_{B1} = -100I_{B2} = I_C = 700mA</p>		0.14		μs
Strange Time	t _{stg}			1.35		μs
Fall Time	t _f			0.1		μs

■ Marking

Marking	CU
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