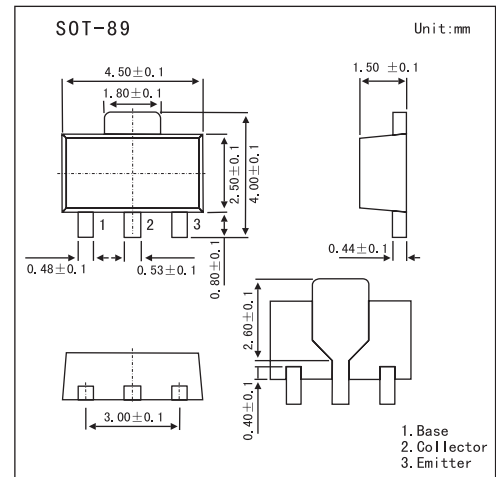


High-Voltage Switching Transistor

2SA1759

■ Features

- High breakdown voltage
- Low saturation voltage
- High switching speed

■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Collector-emitter Voltage	V_{CE0}	-400	V
Collector-base Voltage	V_{CBO}	-400	V
Emitter-base Voltage	V_{EBO}	-7	V
Collector current	I_C	-0.1	A
Collector current (pulse) *1	I_{CP}	-0.2	A
Collector power dissipation	P_C	0.5	W
		2 *2	
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

* $P_w=100\text{ms}$

*2 When mounted on a 40X40X0.7 mm ceramic board

2SA1759

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector-emitter breakdown voltage	BV _{CEO}	I _C = -1mA	-400			V
Collector-base breakdown voltae	BV _{CB0}	I _C = -50 μ A	-400			V
Emitter-base breakdown voltage	BV _{EBO}	I _E = -50 μ A	-7			V
Collector cutoff current	I _{CBO}	V _{CB} = -400V			-10	μA
Emitter cutoff current	I _{EBO}	V _{EB} = -6V			-10	μA
Collector-emitter saturation voltage	V _{CE(sat)}	I _C = -20mA , I _B = -2mA		-0.2	-0.5	V
Base-emitter saturation voltage	V _{BE(sat)}	I _C = -20mA , I _B = -2mA			-1.2	V
DC current transfer ratio	h _{FE}	V _{CE} = -10V , I _C = -10mA	82		180	
Transition frequency	f _T	V _{CE} = -10V , I _E = 10mA , f = 5MHz		200		MHz
Output Capacitance	C _{ob}	V _{CB} = -10V , I _E = 0A , f = 1MHz		36		pF
Turn-on time	t _{on}	I _C = -100mA , R _L = 1.5KΩ		0.7		μs
Storage time	t _{stg}	I _{B1} = -I _{B2} = -10mA		1.8		μs
Fall time	t _{off}	V _{CC} = -150V		1		μs

■ Marking

Marking	AHP
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