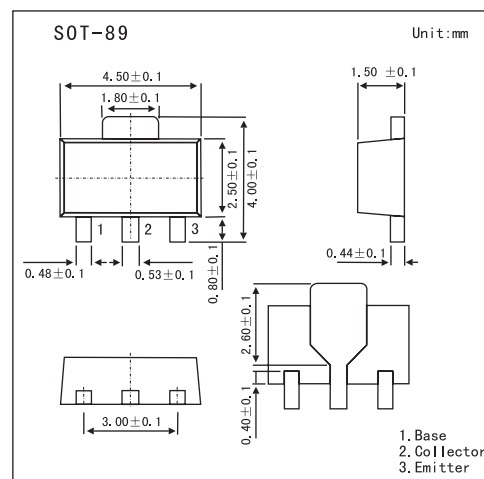


Medium Power Transistor

2SD1767

■ Features

- High breakdown voltage, $BV_{CEO}=80V$, and high current, $I_C=0.7A$.

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

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	80	V
Collector-emitter voltage	V_{CEO}	80	V
Emitter-base voltage	V_{EBO}	5	V
Collector current	I_C	0.7	A
	I_C (Pulse) *1	1	A
Collector power dissipation	P_C	0.5	W
	P_C *2	2	W
Junction temperature	T_j	150	$^\circ C$
Storage temperature	T_{stg}	-55 to +150	$^\circ C$

*1. $P_w=10ms$.

*2. 40X40X0.7mm Ceramic board.

■ Electrical Characteristics $T_a = 25^\circ C$

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector-base voltage	BV_{CBO}	$I_C=50\mu A$	80			V
Collector-emitter voltage	BV_{CEO}	$I_C=2mA$	80			V
Emitter-base voltage	BV_{EBO}	$I_E=50\mu A$	5			V
Collector cutoff current	I_{CBO}	$V_{CB}=50V$			0.5	μA
Emitter cutoff current	I_{EBO}	$V_{EB}=4V$			0.5	μA
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=500mA, I_E=50mA$		0.2	0.4	V
Forward current transfer ratio	h_{FE}	$V_{CE}=3V, I_C=0.1A$	82		390	
Transition frequency	f_T	$V_{CE}=10V, I_E=-50mA, f=100MHz$		120		MHz
Output capacitance	C_{ob}	$V_{CB}=10V, I_E=0A, f=1MHz$		10		pF

■ h_{FE} Classification

Marking	DC		
Rank	P	Q	R
h_{FE}	82~180	120~270	180~390