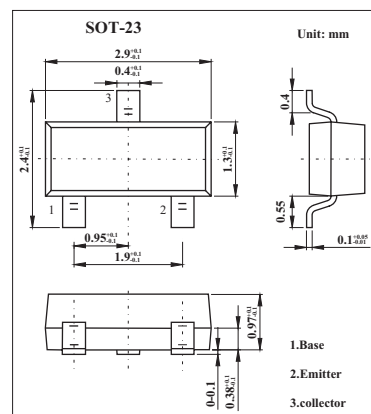


Power Transistor

2SD1757K

■ Features

- Low $V_{CE(sat)}$. (Typ.8mV at $I_C/I_B = 10/1mA$).
- Optimal for muting.

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

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	30	V
Collector-emitter voltage	V_{CEO}	15	V
Emitter-base voltage	V_{EBO}	6.5	V
Collector current *	I_C	0.5	A
Collector power dissipation	P_C	0.2	W
Junction temperature	T_j	150	$^\circ C$
Storage temperature	T_{stg}	-55 to +150	$^\circ C$

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

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector-base breakdown voltage	BV_{CBO}	$I_C=50\mu A$	30			V
Collector-emitter breakdown voltage	BV_{CEO}	$I_C=1mA$	15			V
Emitter-base breakdown voltage	BV_{EBO}	$I_E=50\mu A$	6.5			V
Collector cutoff current	I_{CBO}	$V_{CB}=20V$			0.5	μA
Emitter cutoff current	I_{EBO}	$V_{EB}=4V$			0.5	μA
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C/I_B=500mA/50mA$		0.1	0.4	V
DC current transfer ratio	h_{FE}	$V_{CE}=3V, I_C=100mA$	120		560	
Output capacitance	f_T	$V_{CE}=5V, I_E=-50mA, f=100MHz$		150		MHz
Transition frequency	C_{ob}	$V_{CB}=10V, I_E=0A, f=1MHz$		15		pF

■ h_{FE} Classification

Marking	AA		
	Q	R	S
h_{FE}	120~270	180~390	270~560