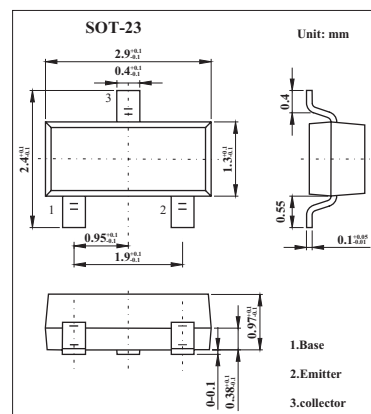


## Power Transistor

## 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	$\mu A$
Emitter cutoff current	$I_{EBO}$	$V_{EB}=4V$			0.5	$\mu A$
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