

Power Transistor (15V, 0.5A)

2SD1757K

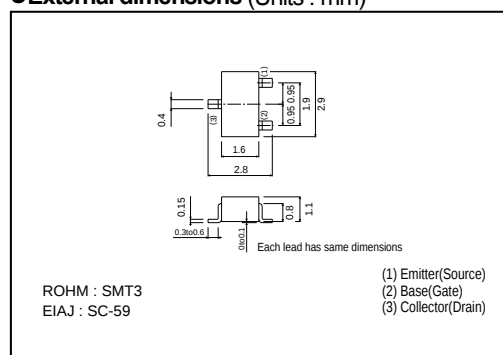
●Features

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

●Absolute maximum ratings ($T_a = 25^\circ C$)

Parameter	Symbol	Limits	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~+150	$^\circ C$

●External dimensions (Units : mm)



●Packaging specifications and h_{FE}

Type	2SD1757K
Package	SMT3
h_{FE}	QRS
Marking	AA *
Code	T146
Basic ordering unit (pieces)	3000

* Denotes h_{FE}

●Electrical characteristics ($T_a = 25^\circ C$)

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