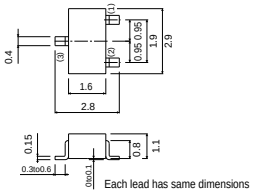
Power Transistor (15V, 0.5A)

2SD1757K

●Features

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

●External dimensions (Units : mm)



ROHM : SMT3
EIAJ : SC-59

(1) Emitter(Source)
(2) Base(Gate)
(3) Collector(Drain)

●Absolute maximum ratings (Ta = 25°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	Tj	150	°C
Storage temperature	Tstg	–55~+150	°C

●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 (Ta = 25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Collector-base breakdown voltage	BV_{CBO}	30	-	-	V	I_C = 50μA
Collector-emitter breakdown voltage	BV_{CEO}	15	-	-	V	I_C = 1mA
Emitter-base breakdown voltage	BV_{EBO}	6.5	-	-	V	I_E = 50μA
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_B = 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	Cob	-	15	-	pF	V_{CB} = 10V , I_E = 0A , f = 1MHz

Notes

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