Muting Transistor (15V, 1A)

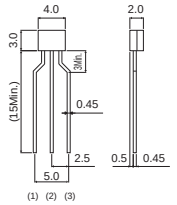
2SD1468S

●Features

1) Low saturation voltage, typically $V_{CE(sat)}$ = 0.08V at I_C / I_B = 500mA / 500μA.
2) Ideal for low voltage, high current drives.
3) High DC current gain and high current.

●Dimensions (Unit : mm)

SPT



(1)Emitter
(2)Collector
(3)Base

Taping specifications

●Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Collector-base voltage	V_{CBO}	30	V
Collector-emitter voltage	V_{CES}	15	V
Emitter-base voltage	V_{EBO}	5	V
Collector current	I_C	1	A
Collector power dissipation	P_C	0.3	W
Junction temperature	Tj	150	°C
Storage temperature	Tstg	–55 to +150	°C

●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}	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	$V_{CE(sat)}$	–	0.08	0.4	V	I_C/I_B=0.5mA/50mA
DC current transfer ratio	h_{FE}	120	–	390	–	V_{CE}/I_C=3V/0.1A
Transition frequency	f_T	50	150	–	MHz	V_{CE}=5V , I_E= –50mA , f=100MHz
Output capacitance	Cob	–	15	30	pF	V_{CE}=10V , I_E=0A , f=1MHz

●Packaging specifications and h_{FE}

Type	2SD1468S
Package	SPT
h_{FE}	QRS
Code	TP
Basic ordering unit (pieces)	5000

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●Electrical characteristics curves

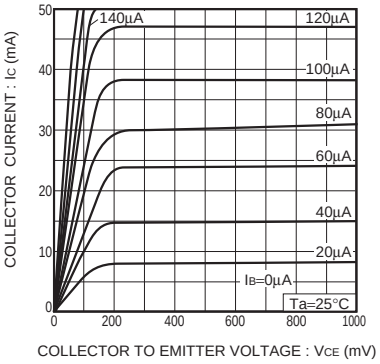

Fig.1 Ground emitter output characteristics

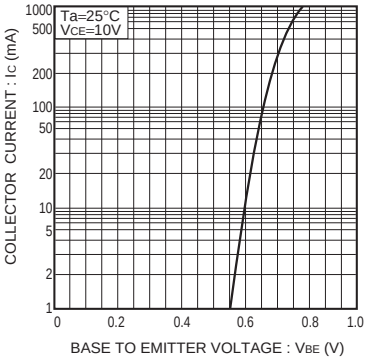

Fig.2 Ground emitter propagation characteristics

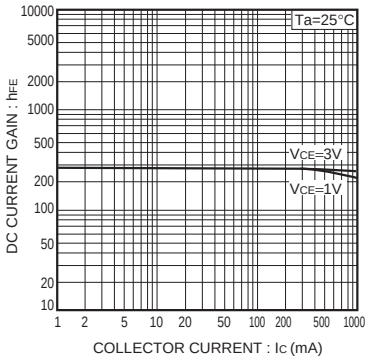

Fig.3 DC current gain vs. collector current

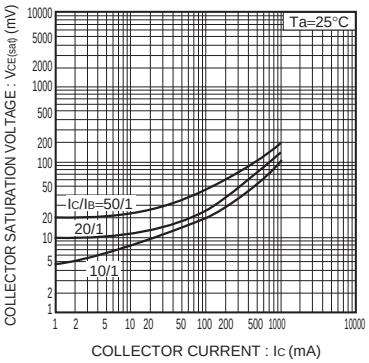

Fig.4 Collector-emitter saturation voltage vs. collector current

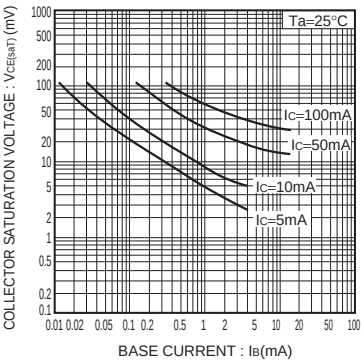

Fig.5 Collector-emitter saturation voltage vs. base current

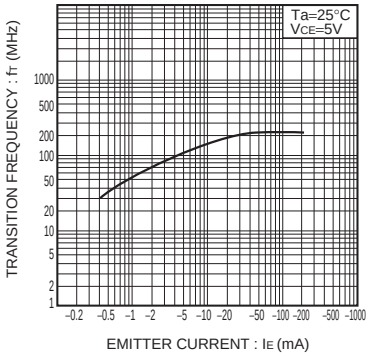

Fig.6 Gain bandwidth product vs. emitter current

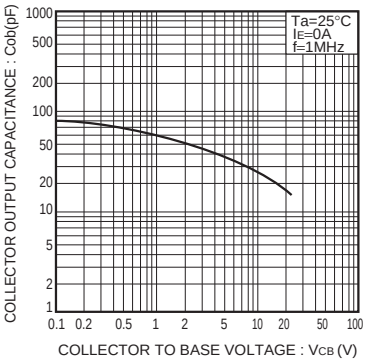

Fig.7 Collector output capacitance vs. collector-base voltage

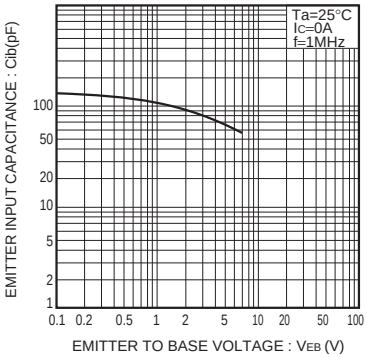

Fig.8 Emitter input capacitance vs. emitter-base voltage

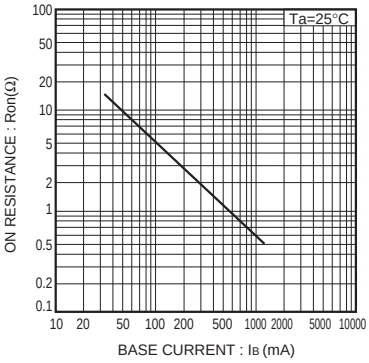

Fig.9 "ON" resistance vs. base current characteristics

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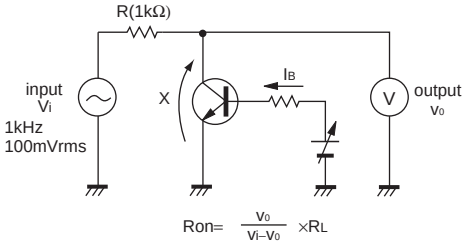

Fig.10 "ON" resistance measurement circuit

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