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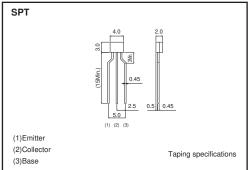
# Muting Transistor (15V, 1A)

#### 2SD1468S

#### ● Features

- 1) Low saturation voltage, typically  $V_{CE(sat)}$  = 0.08V at Ic / IB = 500mA / 500 $\mu$ A.
- 2) Ideal for low voltage, high current drives.
- 3) High DC current gain and high current.

#### ●Dimensions (Unit:mm)



#### ●Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Collector-base voltage	Vсво	30	V
Collector-emitter voltage	Vces	15	V
Emitter-base voltage	VEBO	5	V
Collector current	Ic	1	A
Collector power dissipation	Pc	0.3	W
Junction temperature	Tj	150	°C
Storage temperature	Tstg	-55 to +150	°C

#### ●Electrical characteristics (Ta=25°C)

Parameter	Symbol	Min.	Тур.	Max.	Unit	Conditions
Collector-base breakdown voltage	ВУсво	30	-	-	V	Ic=50μA
Collector-emitter breakdown voltage	BVcEo	15	_	-	V	Ic=1mA
Emitter-base breakdown voltage	ВУево	5	-	-	V	Iε=50μA
Collector cutoff current	Ісво	-	-	0.5	μΑ	V <sub>CB</sub> =20V
Emitter cutoff current	Іево	-	-	0.5	μΑ	V <sub>EB</sub> =4V
Collector-emitter saturation voltage	V <sub>CE</sub> (sat)	-	0.08	0.4	V	Ic/I <sub>B</sub> =0.5mA/50mA
DC current transfer ratio	hfe	120	-	390	-	Vce/lc=3V/0.1A
Transition frequency	f⊤	50	150	-	MHz	Vc=5V , I=-50mA , f=100MHz
Output capacitance	Cob	_	15	30	pF	Vce=10V , Ie=0A , f=1MHz

#### ●Packaging specifications and hfe

Туре	2SD1468S
Package	SPT
hfE	QRS
Code	TP
Basic ordering unit (pieces)	5000

2SD1468S Data Sheet

#### •Electrical characteristics curves

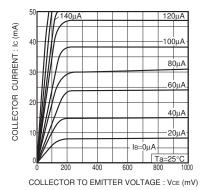


Fig.1 Ground emitter output characteristics

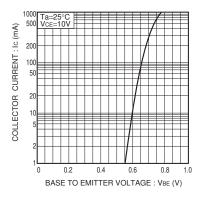


Fig.2 Ground emitter propagation characteristics

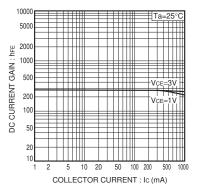


Fig.3 DC current gain vs. collector current

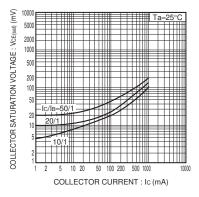


Fig.4 Collector-emitter saturation voltage vs. collector current

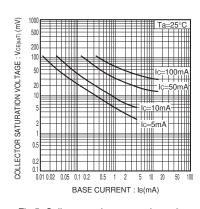


Fig.5 Collector-emitter saturation voltage vs. base current

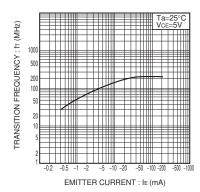


Fig.6 Gain bandwidth product vs. emitter current

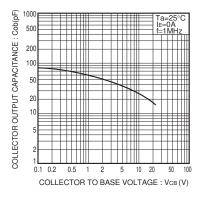


Fig.7 Collector output capacitance vs. collector-base voltage

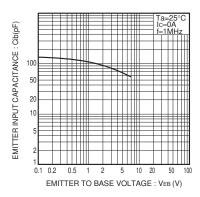


Fig.8 Emitter input capacitance vs. emitter-base voltage

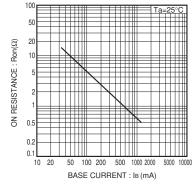


Fig.9 "ON" resistance vs. base current characteristics

2SD1468S Data Sheet

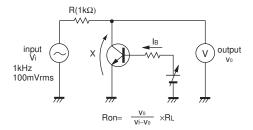


Fig.10 "ON" resistance measurement circuit

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