Medium Power Transistor (-60V, -2A)

2SB1561

Features

 Low saturation voltage, typically VcE(sat) = −0.15V at lc / la=−1A / −50mA.

- 2) Collector-emitter voltage = -60 V
- 3) Pc = 2 W

(on 40 x 40 x 0.7 mm ceramic board).

4) Complements the 2SD2391.

●Packaging specifications and hre

Туре	2SB1561
Package	MPT3
hre	Q
Marking	BL*
Code	T100
Basic ordering unit (pieces)	1000

^{*} Denotes her

●Absolute maximum ratings (Ta=25℃)

Parameter	Symbol	Limits	Unit	
Collector-base voltage	Vсво	-60	V	
Collector-emitter voltage	VCEO	-60	V	
Emitter-base voltage	VEBQ	-6	V	
Collector current	lc	-2	Α	
	Ice	-5	A *1	
Collector power dissipation	Pc	0.5	w	
	FC	2	***	
Junction temperature	Tj	150	°C	
Storage temperature	Tstg	-55~+150	င	

^{*1} Single pulse, Pw=10ms

●Electrical characteristics (Ta=25°C)

Parameter	Symbol	Min.	Тур.	Max.	Unit	Conditions	
Collector-base breakdown voltage	ВУсво	-60		_	V	Ic=-50 μA	
Collector-emitter breakdown voltage	BVceo	-60	_	_	V	Ic=-1mA	
Emitter-base breakdown voltage	BVEBO	-6	_	_	V	IE=-50 μ A	
Collector cutoff current	Ісво	_	_	-0.1	μΑ	V _{CB} =-50V	
Emitter cutoff current	lebo	_	_	-0.1	μA	VEB=-5V	
Collector-emitter saturation voltage	VCE(sat)	_	-0.15	-0.35	V	Ic/Is=-1A/-50mA	*
DC current transfer ratio	h⊧∈	120	_	270	_	VcE/Ic=-2V/-0.5A	
Transition frequency	fτ	_	200	_	MHz	Vc=-2V, I=0.5A, f=100MHz	*
Output capacitance	Cob	_	23	_	pF	Vcs=-10V , IE=0A , f=1MHz	

^{*} Measured using pulse current

(94S-191-B228)

Medium Power Transistor (60V, 2A)

2SD2391

Feature:

- 1) Low saturation voltage, typically $V_{\text{CE(sat)}} = 0.13 \text{V}$ at Ic / Is=1A / 50mA.
- 2) Collector-emitter voltage = 60 V
- 3) Pc = 2 W

(on $40 \times 40 \times 0.7$ mm ceramic board).

4) Complements the 2SB1561.

●Packaging specifications and hre

Туре	2SD2391
Package	MPT3
hfe	Q
Marking	DT*
Code	T100
Basic ordering unit (pieces)	1000

^{*} Denotes hre

●Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit	
Collector-base voltage	Vсво	60	٧	
Collector-emitter voltage	VCEO	60	٧	
Emitter-base voltage	VEBO	6	٧	
Collector current	1-	2	Α	
	lc	6	A *1	
Collector power dissipation	D.	0.5	141	
	Pc	2	W *2	
Junction temperature	Tj	150	°C	
Storage temperature	Tstg	-55~+150	°C	

^{★1} Single pulse, Pw=10ms

●Electrical characteristics (Ta=25°C)

,							
Parameter	Symbol	Min.	Тур.	Max.	Unit	Conditions	
Collector-base breakdown voltage	ВУсво	60	_	_	V	Ic=50 μ A	
Collector-emitter breakdown voltage	BVceo	60	_	_	V	Ic=1mA	
Emitter-base breakdown voltage	BVEBO	6	_	_	V	IE=50 μ A	
Collector cutoff current	Ісво	_	_	0.1	μΑ	Vc8=50V	
Emitter cutoff current	IEBO	_	_	0.1	μΑ	VEB=5V	
Collector-emitter saturation voltage	VCE(sat)	_	0.13	0.35	V	Ic/ls=1A/50mA	*
DC current transfer ratio	h⊧⊨	120	_	270	_	VcE/Ic=2V/0.5A	
Transition frequency	fτ	_	210	_	MHz	Vc==2V , I==-0.5A , f=100MHz*	
Output capacitance	Cob	_	21	_	рF	Vcs=10V . Is=0A . f=1MHz	

^{*} Measured using pulse current

(94S-380-D228)



^{*2} When mounted on a 40 x 40 x 0.7 mm ceramic board.

^{*2} When mounted on a 40 x 40 x 0.7 mm ceramic board.

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