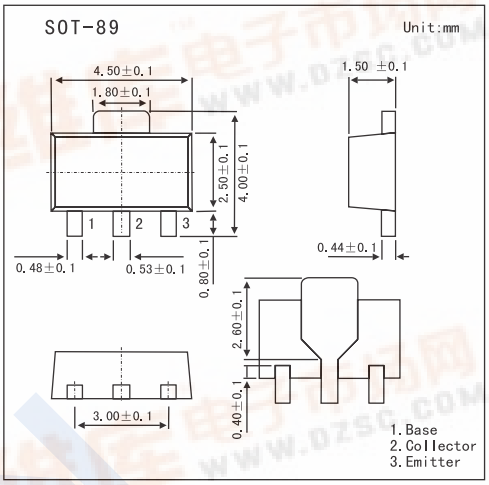
Medium Power Transistor

2SB1132



■ Features

- Low $V_{CE(sat)}$
- Compliments to 2SD1664

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector-Base Voltage	V_{CBO}	-40	V
Collector-Emitter Voltage	V_{CEO}	-32	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current (DC)	I_C	-1	A
Single pulse, Pw=100ms		-2	A
Collector Power Dissipation	P_C *	0.5	W
Jumction temperature	T_j	150	℃
Storage temperature Range	T_{stg}	-55 to +150	℃

* mounted on a 40x40x0.7mm ceramic board.

■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector Cut-off Current	I_{CBO}	V_{CB} = -20V , I_E = 0			-0.5	μA
Emitter Cut-off Current	I_{EBO}	V_{EB} = -4V , I_C = 0			-0.5	μA
Collector-base Breakdown Voltage	$V_{(BR)CBO}$	I_C = -50uA , I_E = 0	-40			V
Collector-emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C = -1mA , I_B = 0	-32			V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	I_E = -50uA	-5			
DC Current Gain	h_{FE}	V_{CE} = -3V , I_C = -0.1A	82		390	
Transition Frequency	f_T	V_{CE} = -5V , I_E = 50mA , f = 30MHz		150		MHz
Collector Output Capacitance	C_{ob}	V_{CB} = -10V , I_E = 0 , f = 1MHz		20	30	pF

■ h_{FE} Classification

Marking	BA		
Rank	P	Q	R
h_{FE}	82 ～ 180	120 ～ 270	180 ～ 390

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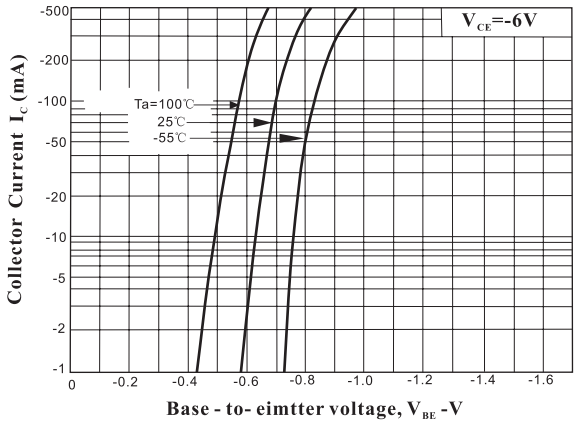
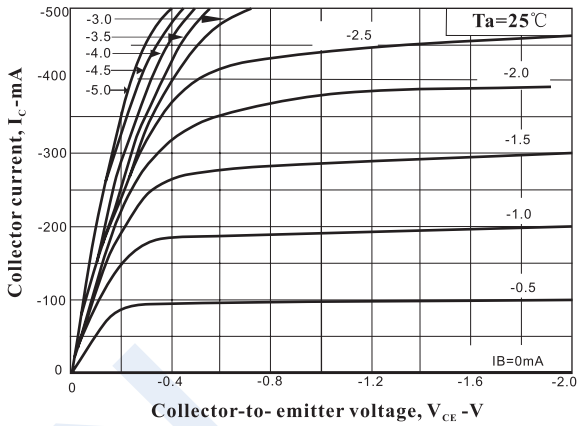
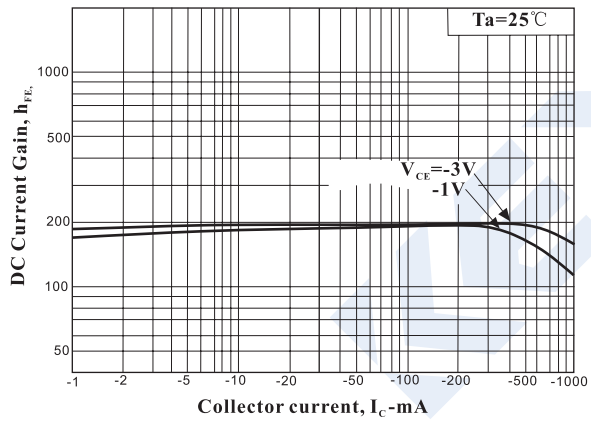
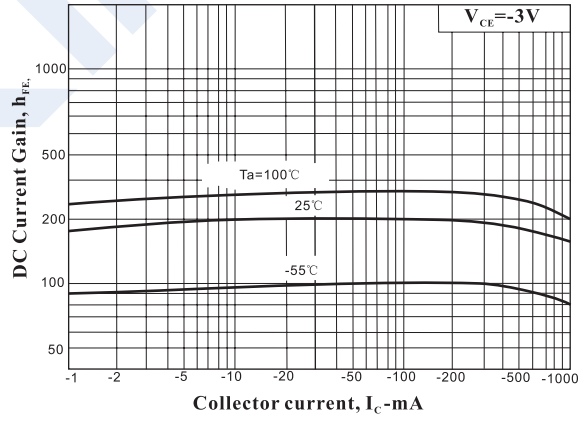
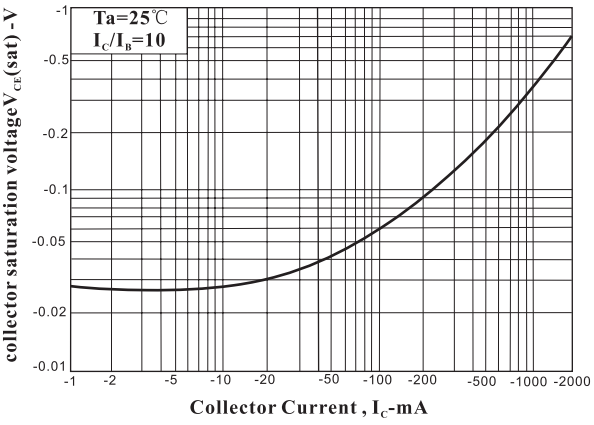
■ Electrical Characteristics Curves

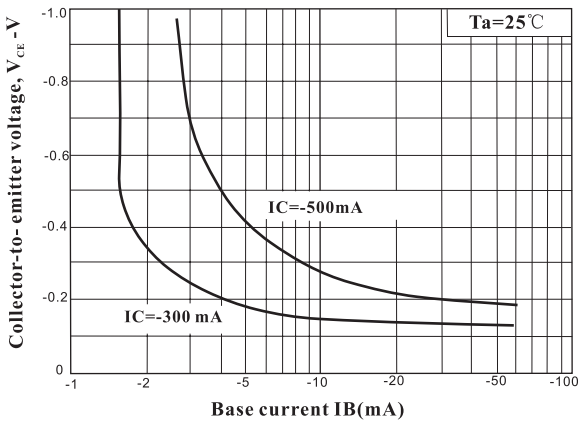












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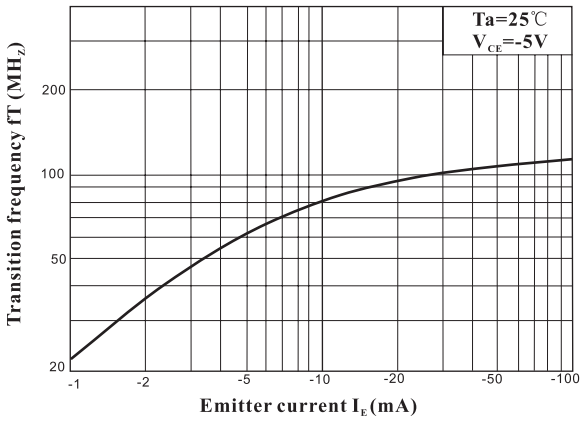
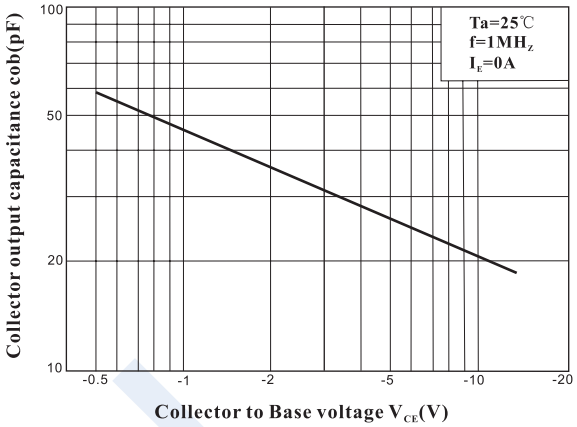
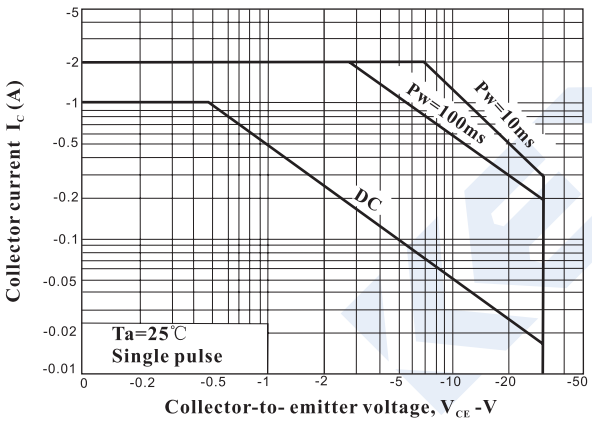

Ta=25℃
V_{CE}=-5V
Transition frequency fT (MH_Z)
200
100
50
20
-1
-2
-5
-10
-20
-50
-100
Emitter current I_E (mA)


Ta=25℃
f=1MH_Z
I_E=0A
Collector output capacitance cob(pF)
100
50
20
10
-0.5
-1
-2
-5
-10
-20
Collector to Base voltage V_{CE}(V)


Collector current I_C (A)
-5
-2
-1
-0.5
-0.2
-0.1
-0.05
-0.02
-0.01
Pw=10ms
Pw=100ms
DC
Ta=25℃
Single pulse
0
-0.2
-0.5
-1
-2
-5
-10
-20
-50
Collector-to- emitter voltage, V_{CE} -V