

SILICON POWER TRANSISTORS

2SB546A, 547A/2SD401A, 402A

VERTICAL DEFLECTION OUTPUT FOR COLOR TV

PNP/NPN SILICON TRIPLE DIFFUSED TRANSISTORS

DESCRIPTION

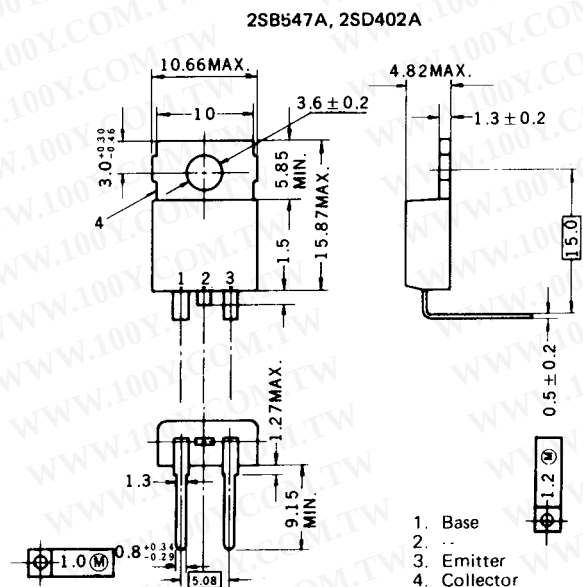
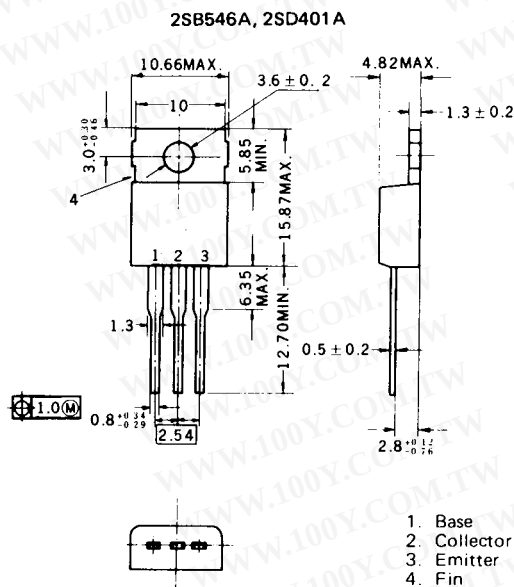
The 2SB546A (PNP), 2SD401A (NPN), 2SB547A (PNP), and 2SD402A (NPN) are high voltage triple diffused silicon transistors. These devices are designed for use in line-operated color TV vertical deflection of complementary symmetry circuit. 2SB546A and 2SD401A are complementary transistors, consisting of straight leads. 2SB547A and 2SD402A consist of emitter and base leads for insertion into TO-66 sockets.

QUICK REFERENCE DATA

			2SB546A, 2SB547A	2SD401A, 2SD402A	
Collector-emitter voltage (open base)	V_{CEO}	MAX.	150	150	V
Collector current (peak value)	I_{CM}	MAX.	3	3	A
Total power dissipation up to $T_{case} = 25^{\circ}C$	P_{tot}	MAX.	30	30	W
D.C. Current gain	h_{FE}	MIN.	40	40	
$I_C = -0.4/0.4A, V_{CE} = -10/10V$					

MECHANICAL DATA

(Dimensions in mm)



勝特力材料 886-3-5753170
勝特力电子(上海) 86-21-54151736
勝特力电子(深圳) 86-755-83298787
[Http://www.100y.com.tw](http://www.100y.com.tw)

勝特力材料 886-3-5753170
 勝特力电子(上海) 86-21-54151736
 勝特力电子(深圳) 86-755-83298787
[Http://www.100y.com.tw](http://www.100y.com.tw)

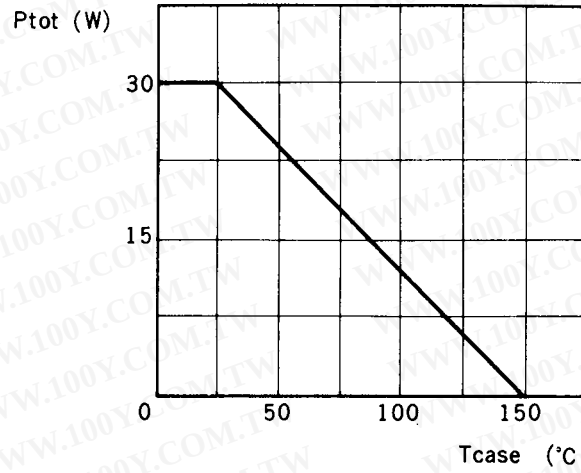
ABSOLUTE MAXIMUM RATINGS ($T_{amb} = 25^{\circ}\text{C}$)

Voltages ($T_{amb} = 25^{\circ}\text{C}$)			2SB546A, 2SB547A	2SD401A, 2SD402A	
Collector-base voltage (open emitter)	V_{CBO}	MAX.	-200	200	V
Collector-emitter voltage (open base)	V_{CEO}	MAX.	-150	150	V
Emitter-base voltage (open collector)	V_{EBO}	MAX.	-5.0	5.0	V
Currents ($T_{amb} = 25^{\circ}\text{C}$)					
Collector current (D.C.)	I_C	MAX.	-2.0	2.0	A
Collector current (peak value)	I_{CM}	MAX.	-3.0	3.0	A
Base current (peak value)	I_{BM}	MAX.	-1.5	1.5	A
Power dissipation					
Total power dissipation at $T_{case} = 25^{\circ}\text{C}$	P_{tot}	MAX.		30	W
TEMPERATURES					
Storage temperature	T_{stg}			-55 to +150	$^{\circ}\text{C}$
Junction temperature	T_j			150	$^{\circ}\text{C}$
THERMAL RESISTANCE					
from junction to case	$R_{th\ j-case}$			4.16	$^{\circ}\text{C/W}$
from junction to ambient in free air	$R_{th\ j-a}$			78	$^{\circ}\text{C/W}$

ELECTRICAL CHARACTERISTICS ($T_{amb} = 25^{\circ}\text{C}$)

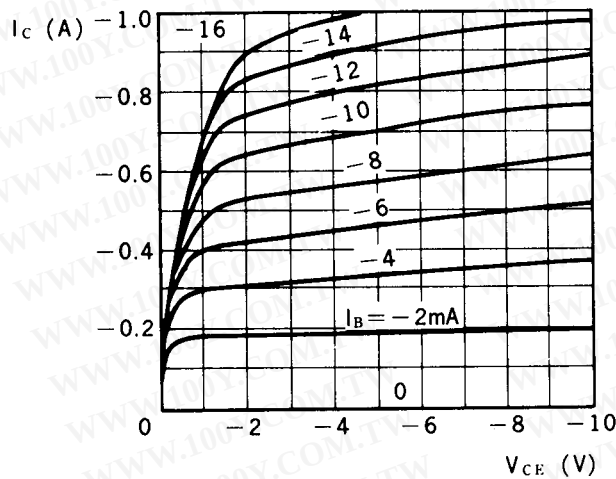
Collector cut-off current		2SB546A, 2SB547A, 2SD401A, 2SD402A		
$I_E = 0, V_{CB} = -150/150\text{V}$	I_{CBO}	<	-50/50	μA
Emitter cut-off current				
$V_{EB} = -4.0/4.0\text{V}, I_C = 0$	I_{EBO}	<	-50/50	μA
D.C. current gain				
$V_{CE} = -10/10\text{V}, I_C = -0.4/0.4\text{A}$	h_{FE}	>	40/40	
Collector-emitter saturation voltage				
$I_C = -0.5/0.5\text{A}, I_B = -0.05/0.05\text{A}$	$V_{CE(sat)}$	<	-2.0/2.0	V
Transition frequency				
$V_{CE} = -10/10\text{V}, I_C = -0.4/0.4\text{A}$	f_T	TYP.	7/7	MHz
Collector capacitance				
$V_{CB} = -10/10\text{V}, f = 1.0\text{MHz}, I_E = 0$	C_C	TYP.	75/45	pF

勝特力材料 886-3-5753170
 勝特力电子(上海) 86-21-54151736
 勝特力电子(深圳) 86-755-83298787
[Http://www.100y.com.tw](http://www.100y.com.tw)

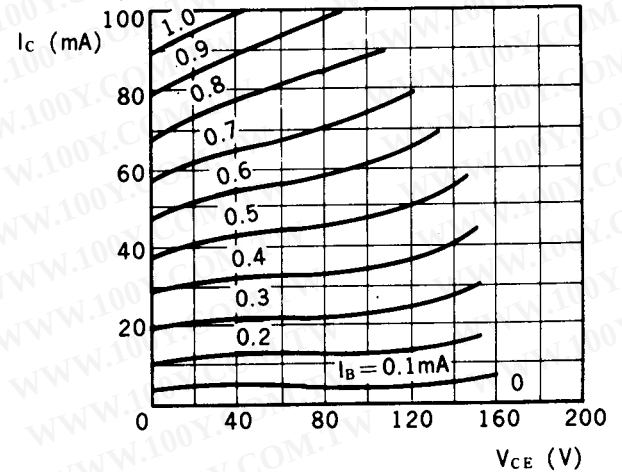
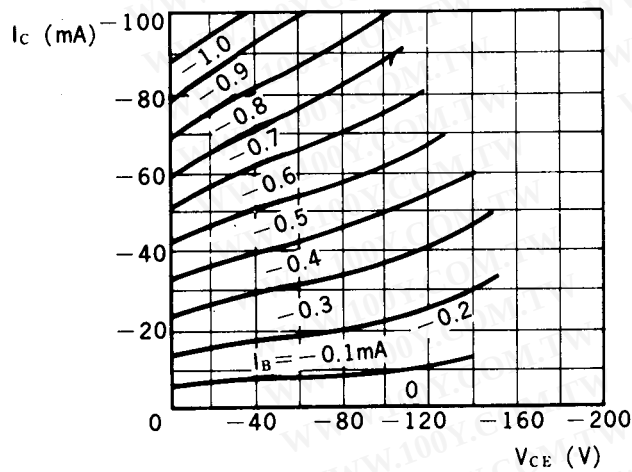
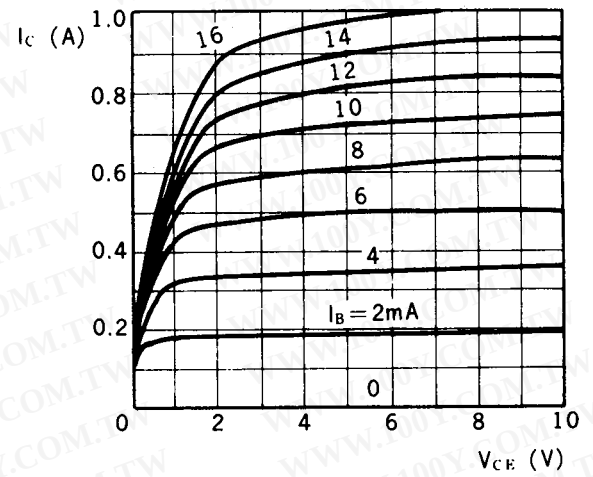


TYPICAL CHARACTERISTICS ($T_{amb} = 25^{\circ}C$)

2SB546A, 2SB547A

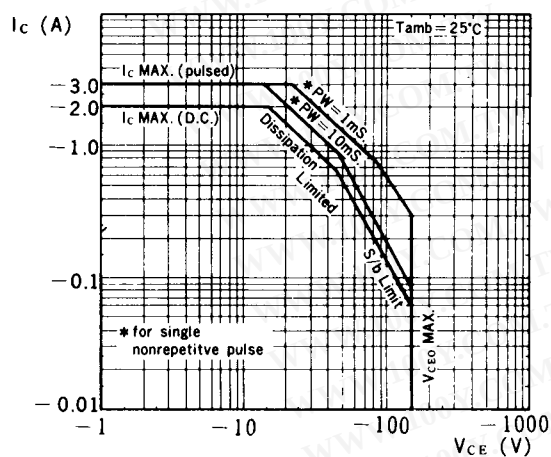
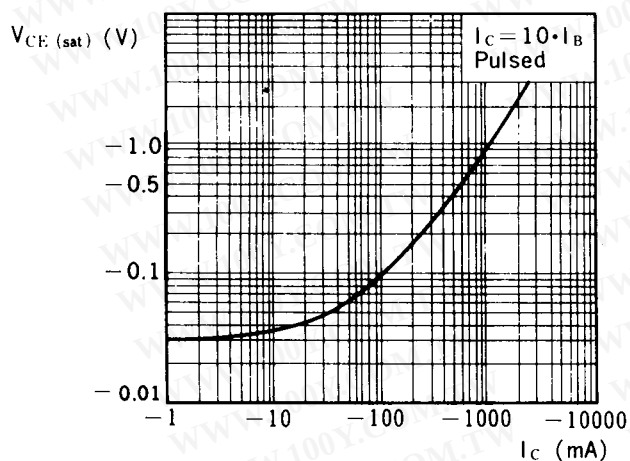
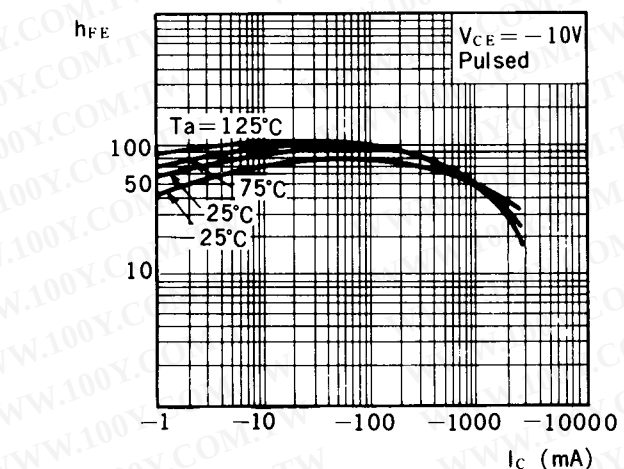


2SD401A, 2SD402A



勝特力材料 886-3-5753170
 勝特力电子(上海) 86-21-54151736
 勝特力电子(深圳) 86-755-83298787
[Http://www.100y.com.tw](http://www.100y.com.tw)

2SB546A, 547A



2SD401A, 2SD402A

