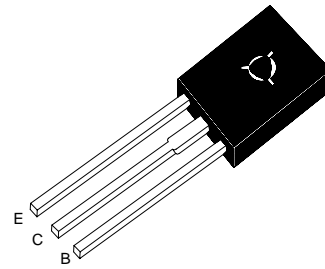


# ST 2SD882H

## NPN Silicon Power Transistor

The transistor is subdivided into four groups, R, Q, P and E, according to its DC current gain.



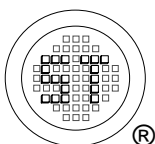
TO-126 Plastic Package

### Absolute Maximum Ratings ( $T_a = 25\text{ }^\circ\text{C}$ )

Parameter	Symbol	Value	Unit
Collector to Base Voltage	$V_{CBO}$	60	V
Collector to Emitter Voltage	$V_{CEO}$	30	V
Emitter to Base Voltage	$V_{EBO}$	5	V
Collector Current	$I_C$	3	A
Collector Current (pulse)	$I_{CP}$	7	A
Total Power Dissipation( $T_a = 25\text{ }^\circ\text{C}$ )	$P_{tot}$	1	W
Total Power Dissipation( $T_C = 25\text{ }^\circ\text{C}$ )	$P_{tot}$	10	W
Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature Range	$T_S$	- 55 to + 150	$^\circ\text{C}$

### Characteristics at $T_a = 25\text{ }^\circ\text{C}$

Parameter	Symbol	Min.	Typ.	Max.	Unit	
DC Current Gain at $V_{CE} = 2\text{ V}$ , $I_C = 1\text{ A}$  at $V_{CE} = 2\text{ V}$ , $I_C = 20\text{ mA}$  Current Gain Group	R Q P E	$h_{FE}$	60	-	120	-
		$h_{FE}$	100	-	200	-
		$h_{FE}$	160	-	320	-
		$h_{FE}$	200	-	400	-
		$h_{FE}$	30	-	-	-
Collector Cutoff Current at $V_{CB} = 60\text{ V}$	$I_{CBO}$	-	-	1	$\mu\text{A}$	
Emitter Cutoff Current at $V_{EB} = 3\text{ V}$	$I_{EBO}$	-	-	1	$\mu\text{A}$	
Collector Emitter Saturation Voltage at $I_C = 2\text{ A}$ , $I_B = 0.2\text{ A}$	$V_{CEsat}$	-	-	0.5	V	
Base Emitter Saturation Voltage at $I_C = 2\text{ A}$ , $I_B = 0.2\text{ A}$	$V_{BEsat}$	-	-	2	V	
Gain Bandwidth Product at $V_{CE} = 5\text{ V}$ , $I_C = 0.1\text{ A}$	$f_T$	-	90	-	MHz	
Output Capacitance at $V_{CB} = 10\text{ V}$ , $f = 1\text{ MHz}$	$C_{ob}$	-	45	-	pF	



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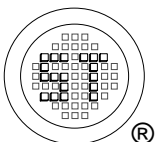
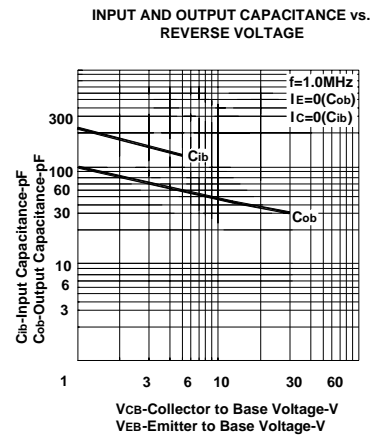
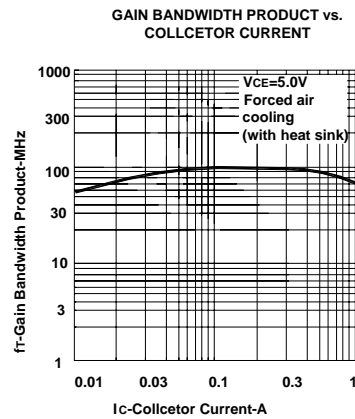
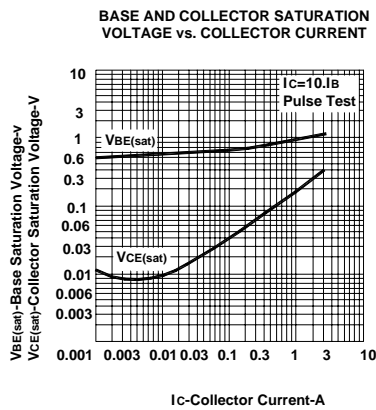
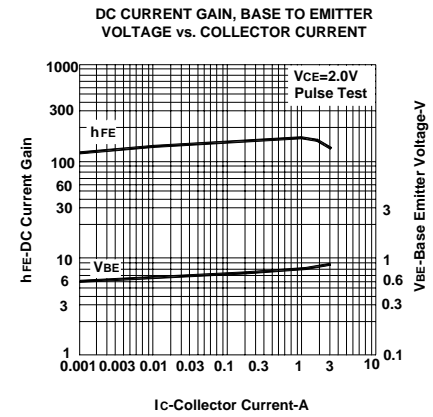
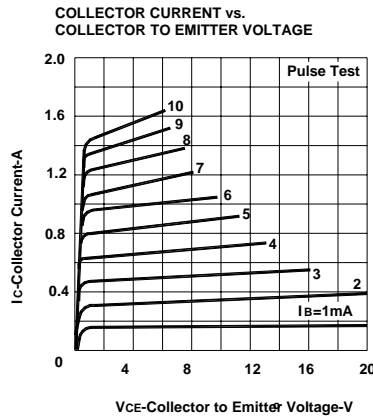
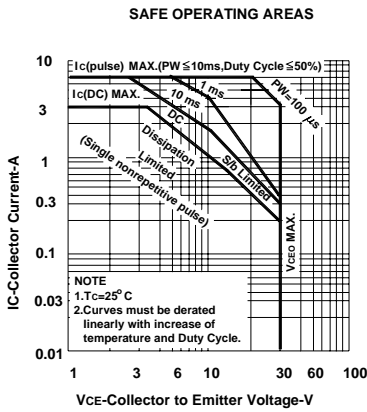
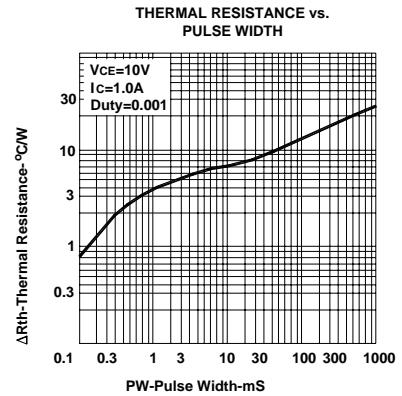
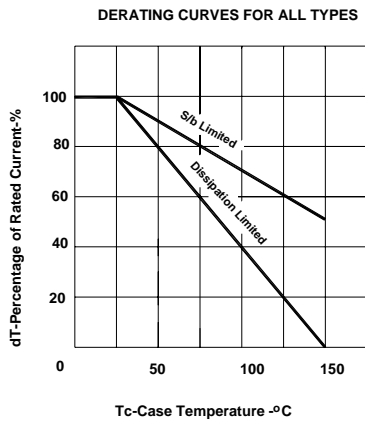
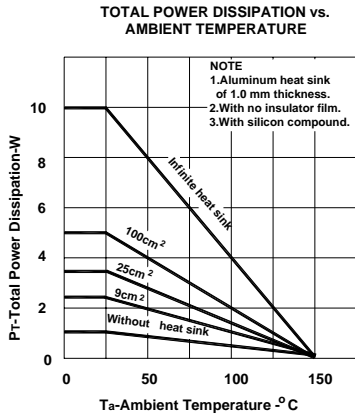
(Subsidiary of Sino-Tech International Holdings Limited, a company listed on the Hong Kong Stock Exchange, Stock Code: 724)



Dated : 13/09/2006

# ST 2SD882H

## TYPICAL CHARACTERISTICS (Ta=25°C)



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ISO/TS 16949 : 2002  
Certificate No. 05103

ISO 14001:2004  
Certificate No. 71116

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Dated : 13/09/2006