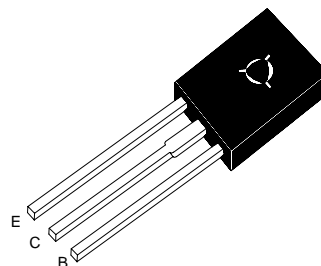


# ST 2SD882H

## NPN Silicon Power Transistor

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

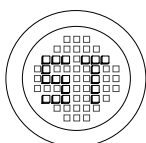


TO-18 Plastic Package

## Absolute Maximum Ratings

	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 (D.C)	$I_C(DC)$	3	A
Collector Current (pulse)	$I_C(pulse)$	7	A
Total power dissipation( $T_a=25^{\circ}C$ )	$P_{tot}$	1	W
Total power dissipation( $T_c=25^{\circ}C$ )	$P_{tot}$	10	W
Junction Temperature	$T_j$	150	$^{\circ}C$
Storage Temperature Range	$T_s$	-55 to +150	$^{\circ}C$

G S P FORM A IS AVAILABLE



®

РАДИОТЕХ

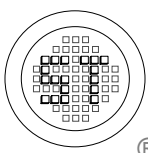
Тел.: (495) 795-0805  
Факс: (495) 234-1603  
Эл. почта: info@rct.ru  
Веб: www.rct.ru

# ST 2SD882H

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

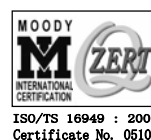
	Symbol	Min.	Typ.	Max.	Unit	
DC Current Gain at $V_{CE}=2\text{V}$ , $I_C=1\text{A}$  Current Gain Group	R	$h_{FE}$	60	-	120	-
	Q	$h_{FE}$	100	-	200	-
	P	$h_{FE}$	160	-	320	-
	E	$h_{FE}$	200	-	400	-
		$h_{FE}$	30	150	-	-
at $V_{CE}=2\text{V}$ , $I_C=20\text{mA}$						
Collector Cutoff Current at $V_{CB}=60\text{V}$	$I_{CBO}$	-	-	1.0	$\mu\text{A}$	
Emitter Cutoff Current at $V_{EB}=3.0\text{V}$	$I_{EBO}$	-	-	1.0	$\mu\text{A}$	
Output Capacitance $V_{CB}=10\text{V}$ , $f=1.0\text{MHz}$	$C_{ob}$	-	45	-	$\text{pF}$	
Base Emitter Saturation Voltage at $I_C=2.0\text{mA}$ , $I_B=0.2\text{A}$	$V_{BE(sat)}$	-	1.0	2.0	$\text{V}$	
Collector Emitter Saturation Voltage at $I_C=2.0\text{mA}$ , $I_B=0.2\text{A}$	$V_{CE(sat)}$	-	0.3	0.5	$\text{V}$	
Gain Bandwidth Product at $V_{CE}=5.0\text{V}$ , $I_C=0.1\text{A}$	$f_T$	-	90	-	$\text{MHz}$	

**G S P FORM A IS AVAILABLE**



## SEMTECH ELECTRONICS LTD.

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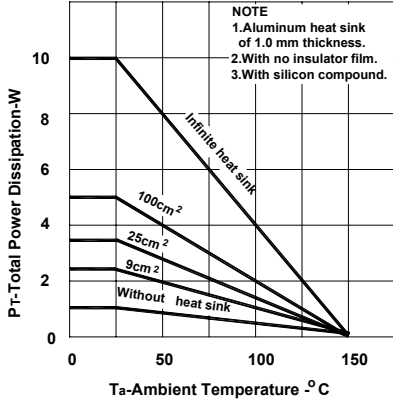


Dated : 07/12/2002

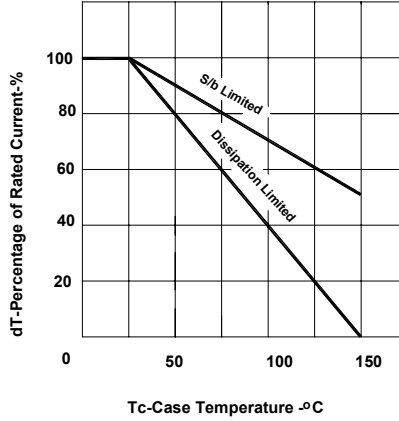
# ST 2SD882H

## TYPICAL CHARACTERISTICS (Ta=25°C)

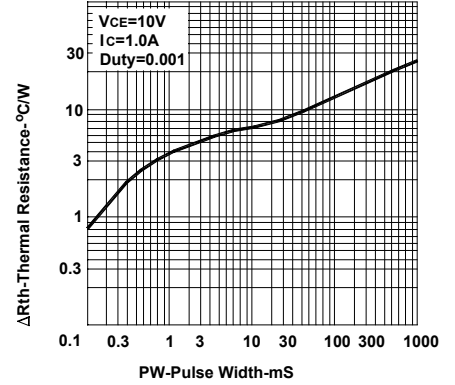
TOTAL POWER DISSIPATION vs. AMBIENT TEMPERATURE



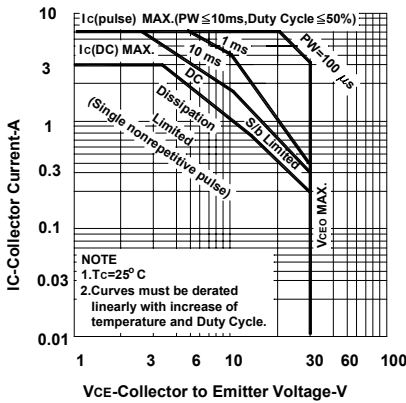
DERATING CURVES FOR ALL TYPES



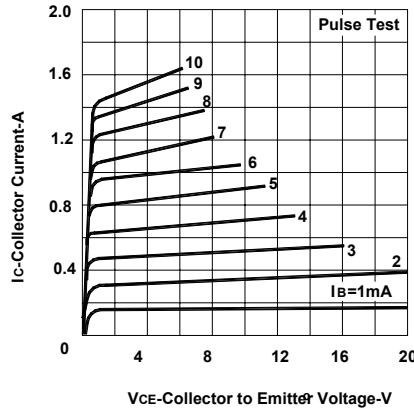
THERMAL RESISTANCE vs. PULSE WIDTH



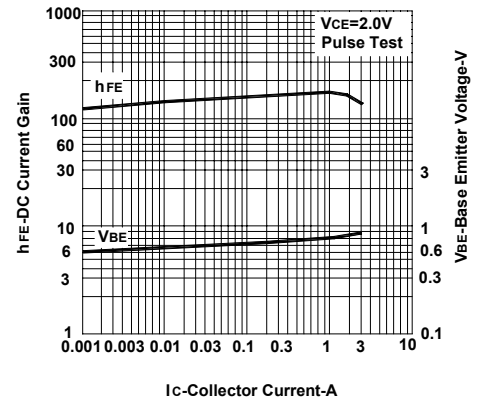
SAFE OPERATING AREAS



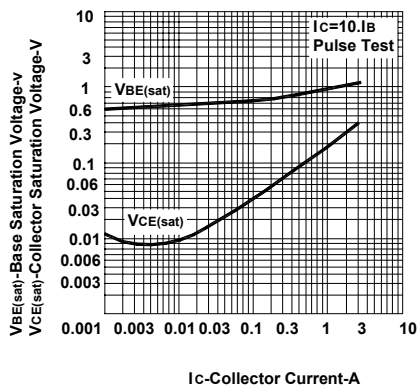
COLLECTOR CURRENT vs. COLLECTOR TO EMITTER VOLTAGE



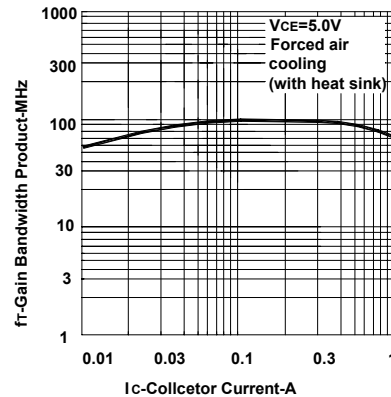
DC CURRENT GAIN, BASE TO EMITTER VOLTAGE vs. COLLECTOR CURRENT



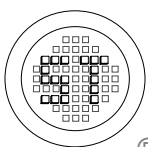
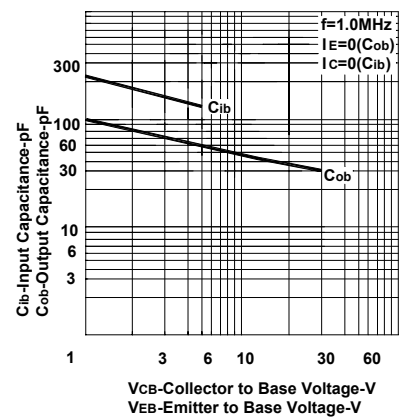
BASE AND COLLECTOR SATURATION VOLTAGE vs. COLLECTOR CURRENT



GAIN BANDWIDTH PRODUCT vs. COLLECTOR CURRENT

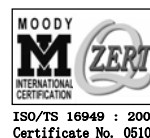


INPUT AND OUTPUT CAPACITANCE vs. REVERSE VOLTAGE



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ISO/TS 16949 : 2002  
Certificate No. 05103



ISO 14001  
Certificate No. 7116



ISO 9001 : 2000  
Certificate No. 5529-1999-02-002-001

Dated : 07/12/2002