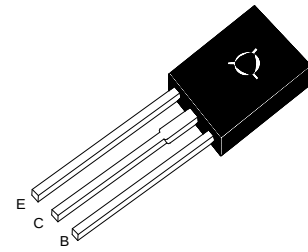


2SD882HT

NPN Silicon Power Transistor

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



TO-18 Plastic Package

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

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

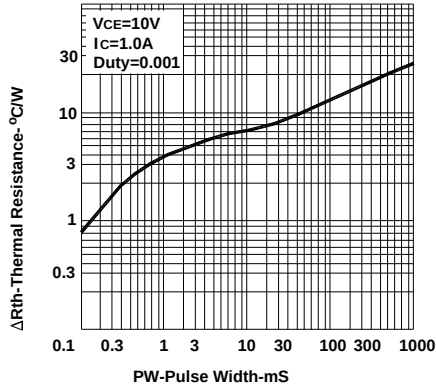
Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Min.	Typ.	Max.	Unit	
DC Current Gain at V _{CE} = 2 V, I _C = 1 A Current Gain Group at V _{CE} = 2 V, I _C = 20 mA	R	h _{FE}	60	-	120	-
	Q	h _{FE}	100	-	200	-
	P	h _{FE}	160	-	320	-
	E	h _{FE}	200	-	400	-
		h _{FE}	30	-	-	-
Collector Base Cutoff Current at V _{CB} = 60 V	I _{CBO}	-	-	1	μA	
Emitter Base Cutoff Current at V _{EB} = 3 V	I _{EBO}	-	-	1	μA	
Collector Emitter Saturation Voltage at I _C = 2 A, I _B = 0.2 A	V _{CE(sat)}	-	-	0.5	V	
Base Emitter Saturation Voltage at I _C = 2 A, I _B = 0.2 A	V _{BE(sat)}	-	-	2	V	
Gain Bandwidth Product at V _{CE} = 5 V, I _C = 0.1 A	f _T	-	90	-	MHz	
Output Capacitance at V _{CB} = 10 V, f = 1 MHz	C _{ob}	-	45	-	pF	

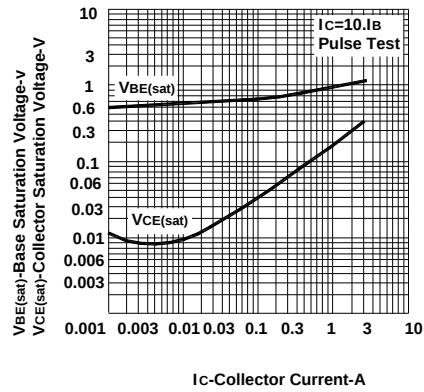
TOP DYNAMIC



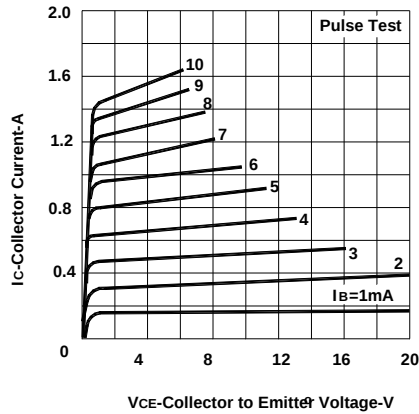
THERMAL RESISTANCE vs.
PULSE WIDTH



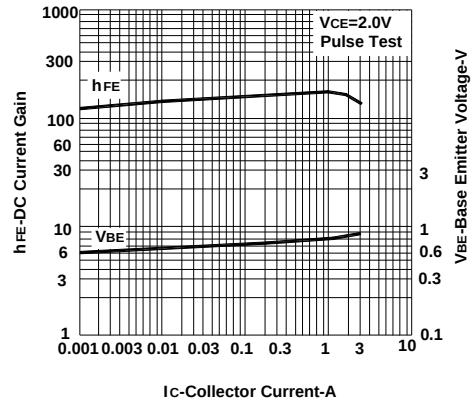
BASE AND COLLECTOR SATURATION
VOLTAGE vs. COLLECTOR CURRENT



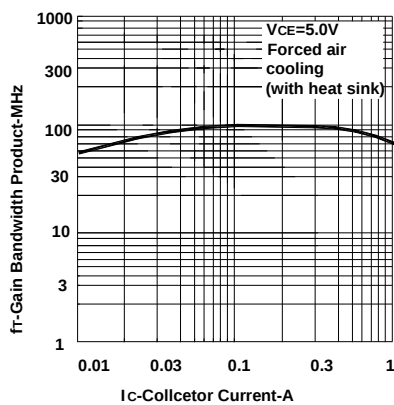
COLLECTOR CURRENT vs.
COLLECTOR TO EMITTER VOLTAGE



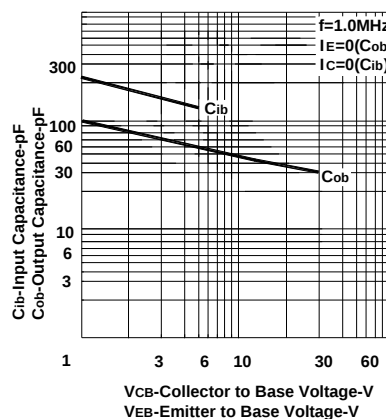
DC CURRENT GAIN, BASE TO EMITTER
VOLTAGE vs. COLLECTOR CURRENT



GAIN BANDWIDTH PRODUCT vs.
COLLECTOR CURRENT



INPUT AND OUTPUT CAPACITANCE vs.
REVERSE VOLTAGE



TOP DYNAMIC



ISO14001 : 2004 Certificate No. 121505007
ISO 9001 : 2008 Certificate No. 50114012
OHSAS 18001 : 2007 Certificate No. 05131508008
IECQ QC 080000 Certificate No. E2418000714M02