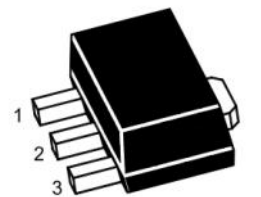




2SD882U Silicon Power Transistor

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

MARKING: D882



1.Base 2.Collector 3.Emitter

SOT-89-3L

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

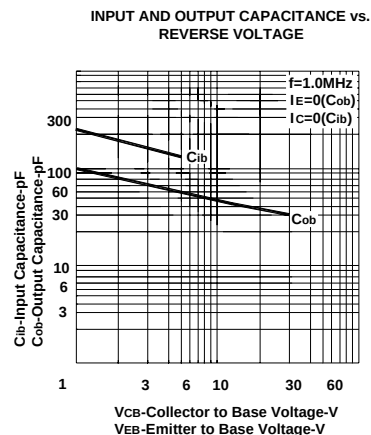
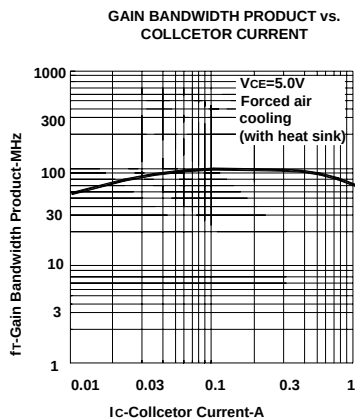
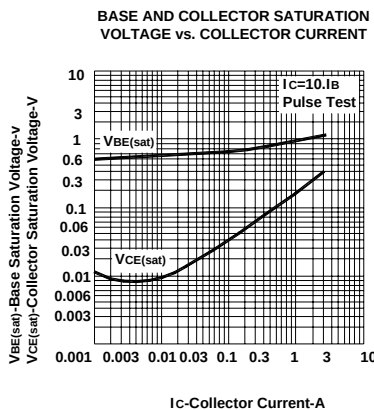
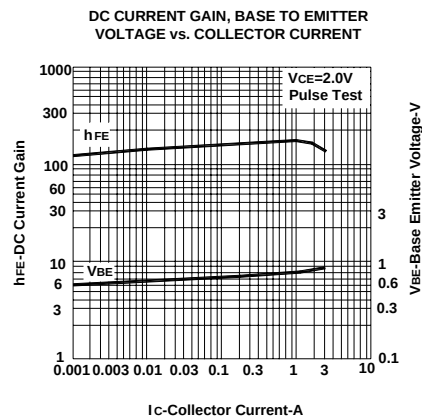
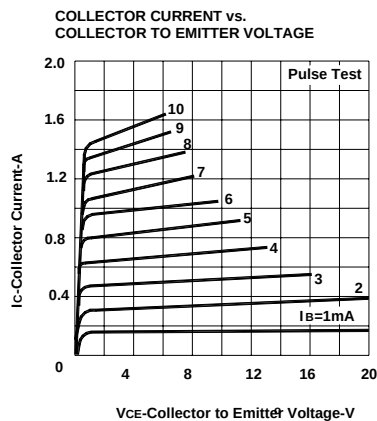
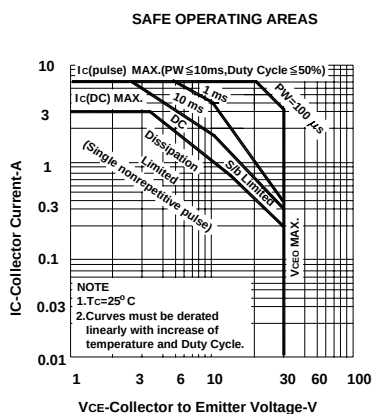
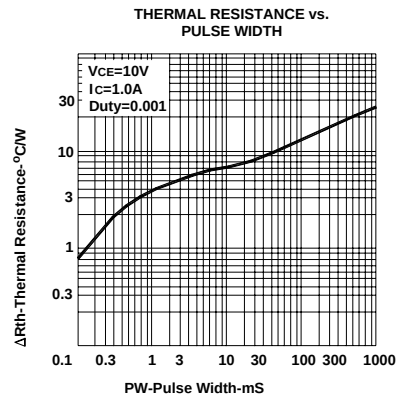
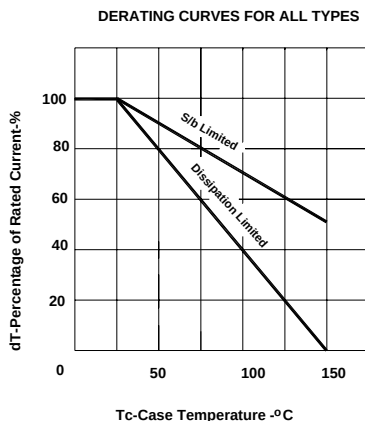
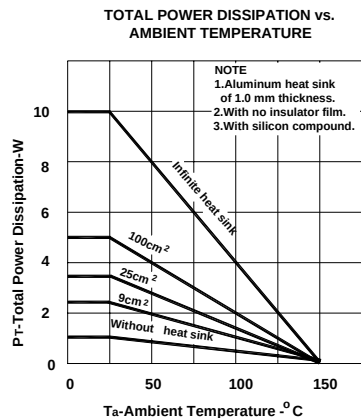
Parameter	Symbol	Value	Unit
Collector to Base Voltage	V_{CBO}	40	V
Collector to Emitter Voltage	V_{CEO}	30	V
Emitter to Base Voltage	V_{EBO}	5	V
Collector Current	I_{C}	3	A
Peak Collector Current ($t = 10 \text{ ms}$)	I_{CP}	7	A
Total power dissipation ($T_a = 25^\circ\text{C}$)	P_{tot}	1	W
Total power 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 $V_{\text{CE}} = 2 \text{ V}$, $I_{\text{C}} = 20 \text{ mA}$ at $V_{\text{CE}} = 2 \text{ V}$, $I_{\text{C}} = 1 \text{ A}$ Current Gain Group	R				
	Q				
	P				
	E				
Collector Base Cutoff Current at $V_{\text{CB}} = 30 \text{ V}$	I_{CBO}	-	-	1	μA
Emitter Base Cutoff Current at $V_{\text{EB}} = 3 \text{ V}$	I_{EBO}	-	-	1	μA
Collector Emitter Saturation Voltage at $I_{\text{C}} = 2 \text{ A}$, $I_{\text{B}} = 0.2 \text{ A}$	$V_{\text{CE(sat)}}$	-	-	0.5	V
Base Emitter Saturation Voltage at $I_{\text{C}} = 2 \text{ A}$, $I_{\text{B}} = 0.2 \text{ A}$	$V_{\text{BE(sat)}}$	-	-	2	V
Gain Bandwidth Product at $V_{\text{CE}} = 5 \text{ V}$, $I_{\text{C}} = 0.1 \text{ A}$	f_{T}	-	90	-	MHz
Output Capacitance at $V_{\text{CB}} = 10 \text{ V}$, $f = 1 \text{ MHz}$	C_{ob}	-	45	-	pF

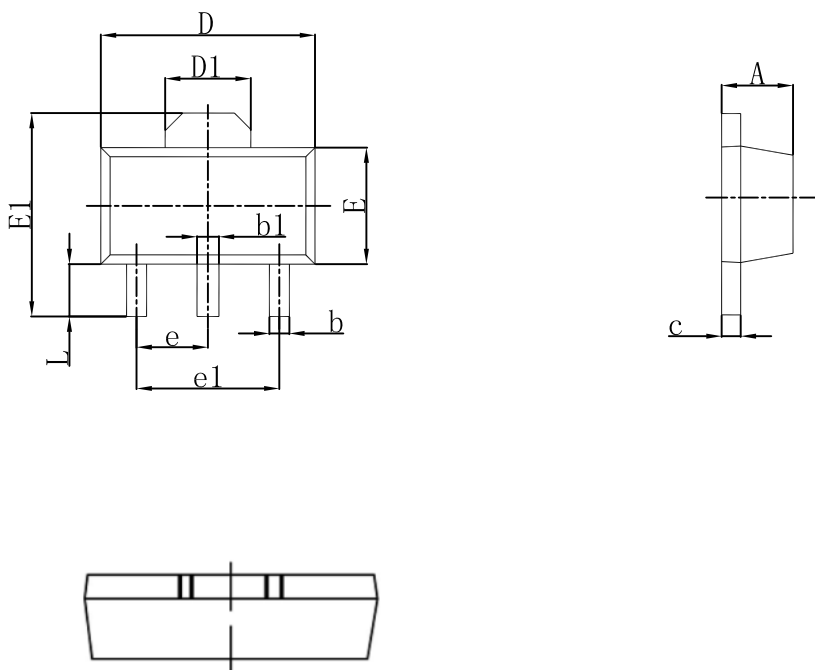


TYPICAL CHARACTERISTICS (Ta=25°C)





SOT-89-3L Outlines Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	1.400	1.600	0.055	0.063
b	0.320	0.520	0.013	0.020
b1	0.400	0.580	0.016	0.023
c	0.350	0.440	0.014	0.017
D	4.400	4.600	0.173	0.181
D1	1.550 REF.		0.061 REF.	
E	2.300	2.600	0.091	0.102
E1	3.940	4.250	0.155	0.167
e	1.500 TYP.		0.060 TYP.	
e1	3.000 TYP.		0.118 TYP.	
L	0.900	1.200	0.035	0.047