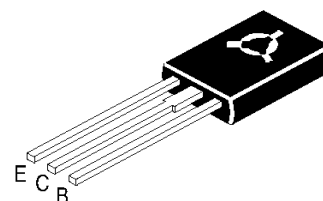


ST 2SD882U-P

NPN SILICON EPITAXIAL POWER TRANSISTOR

These devices are intended for use in medium power linear and switching applications



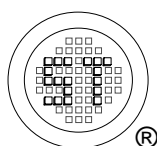
TO-18 Plastic Package

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

Parameter	Symbol	Value	Unit
Collector Base Voltage	V_{CBO}	120	V
Collector Emitter Voltage	V_{CES}	100	V
Collector Emitter Voltage	V_{CEO}	100	V
Emitter Base Voltage	V_{EBO}	6	V
Collector Current	I_C	4	A
Collector Peak Current	I_{CM}	7	A
Base Current	I_B	1	A
Power Dissipation at $T_A = 25\text{ }^\circ\text{C}$	P_D	1.25	mW
Power Dissipation at $T_C = 25\text{ }^\circ\text{C}$	P_D	36	mW
Operating and Storage Temperature Range	T_S	- 65 to + 150	$^\circ\text{C}$

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

Parameter	Symbol	Min.	Max.	Unit
DC Current Gain				
at $V_{CE} = 1\text{ V}$, $I_C = 500\text{ mA}$	h_{FE}	100	260	-
at $V_{CE} = 1\text{ V}$, $I_C = 2\text{ A}$	h_{FE}	15	-	-
at $V_{CE} = 2\text{ V}$, $I_C = 1\text{ A}$	h_{FE}	100	260	-
at $V_{CE} = 5\text{ V}$, $I_C = 10\text{ mA}$	h_{FE}	15	-	-
Collector Base Cutoff Current at $V_{CB} = 120\text{ V}$	I_{CBO}	-	100	μA
Collector Emitter Cutoff Current at $V_{CE} = 100\text{ V}$	I_{CES}	-	100	μA
Emitter Base Cutoff Current at $V_{EB} = 5\text{ V}$	I_{EBO}	-	1	mA
Collector Emitter Breakdown Voltage at $I_C = 1\text{ mA}$	$V_{(BR)CEO}$	100	-	V
Collector Emitter Saturation Voltage at $I_C = 2\text{ A}$, $I_B = 200\text{ mA}$	$V_{CE(sat)}$	-	0.8	V
Base Emitter On Voltage at $V_{CE} = 1\text{ V}$, $I_C = 2\text{ A}$	$V_{BE(on)}$	-	1.5	V
Transition Frequency at $V_{CE} = 1\text{ V}$, $I_C = 250\text{ mA}$	f_T	3	-	MHz



SEMTECH ELECTRONICS LTD.

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



ISO/TS 16949 : 2002
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ISO 14001:2004
Certificate No. 71116



ISO 9001:2000
Certificate No. 0506098