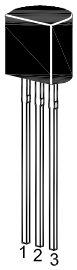
ST 2SD882S

NPN Silicon Epitaxial Planar Transistor

for the output stage of 0.75 W audio, voltage regulator, and relay driver.

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

On special request, these transistors can be manufactured in different pin configurations.



1. Emitter 2. Collector 3. Base
TO-92 Plastic Package

Absolute Maximum Ratings (T_a = 25 °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
Power Dissipation	P_{tot}	750	mW
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	- 55 to + 150	°C

Characteristics at T_a = 25 °C

Parameter			Symbol	Min.	Typ.	Max.	Unit
DC Current Gain							
at V_{CE} = 2 V, I_C = 1 A	Current Gain Group	Q	h_{FE}	100	-	200	-
		P	h_{FE}	160	-	320	-
		E	h_{FE}	250	-	500	-
at V_{CE} = 2 V, I_C = 20 mA			h_{FE}	30	-	-	-
Collector Base Cutoff Current at V_{CB} = 30 V			I_{CBO}	-	-	1	µA
Emitter Base Cutoff Current at V_{EB} = 3 V			I_{EBO}	-	-	1	µA
Collector Base Breakdown Voltage at I_C = 100 µA			$V_{(BR)CBO}$	40	-	-	V
Collector Emitter Breakdown Voltage at I_C = 1 mA			$V_{(BR)CEO}$	30	-	-	V
Emitter Base Breakdown Voltage at I_E = 10 µA			$V_{(BR)EBO}$	5	-	-	V
Collector Emitter Saturation Voltage at I_C = 2 A, I_B = 200 mA			$V_{CE(sat)}$	-	-	0.5	V
Base Emitter Saturation Voltage at I_C = 2 A, I_B = 200 mA			$V_{BE(sat)}$	-	-	2	V
Transition Frequency at V_{CE} = 5 V, I_C = 0.1 A, f = 100 MHz			f_T	-	90	-	MHz
Collector Output Capacitance at V_{CB} = 10 V, f = 1 MHz			C_{ob}	-	45	-	pF