



2SD882/2SD882S NPN Epitaxial Silicon Transistor

**AUDIO FREQUENCY POWER AMPLIFIER  
LOW SPEED SWITCHING**

- Complement to 2SB772

**ABSOLUTE MAXIMUM RATINGS (Ta = 25 °C)**

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V <sub>CB0</sub>	40	V
Collector-Emitter Voltage	V <sub>CE0</sub>	30	V
Emitter-Bias Voltage	V <sub>EBO</sub>	5	V
Collector Current (DC)	I <sub>C</sub>	3	A
*Collector Current (Pulse)	I <sub>C</sub>	7	A
Base Current (DC)	I <sub>B</sub>	0.6	A
Collector Dissipation (Ta=25 °C)	P <sub>C</sub>	10	W
Collector Dissipation (Ta=25 °C)	P <sub>C</sub>	1	W
Junction Temperature	T <sub>J</sub>	150	°C
Storage Temperature	T <sub>stg</sub>	-55~150	°C



- PW ≤ 10ms, Duty Cycle ≤ 50%

**ELECTRICAL CHARACTERISTICS (Ta=25 °C)**

Characteristics	Symbol	Test condition	Min	Typ	Min	Unit
Collector Cutoff Current	I <sub>CB0</sub>	V <sub>CB</sub> =30V, I <sub>B</sub> =0			1	μA
Emitter Cutoff Current	I <sub>EBO</sub>	V <sub>EB</sub> =3V, I <sub>C</sub> =0			1	μA
*DC Current Gain	h <sub>FE1</sub>	V <sub>CE</sub> =2V, I <sub>C</sub> =20mA	30	150		
	h <sub>FE2</sub>	V <sub>CE</sub> =2V, I <sub>C</sub> =1A	60	160	400	
*Collector Emitter Saturation Voltage	V <sub>CE(SAT)</sub>	I <sub>C</sub> =2A, I <sub>B</sub> =0.2A		0.3	0.5	V
*Base Emitter Saturation Voltage	V <sub>BE(SAT)</sub>	I <sub>C</sub> =2A, I <sub>B</sub> =0.2A		1.0	2.0	V
Current Gain Bandwidth Product	f <sub>T</sub>	V <sub>CE</sub> =5V, I <sub>C</sub> =0.1A		90		MHz
Output Capacitance	C <sub>ob</sub>	V <sub>CB</sub> =10V, I <sub>B</sub> =0 f=1MHz		45		pF

- Pulse Test PW ≤ 350 μs, Duty Cycle ≤ 2%

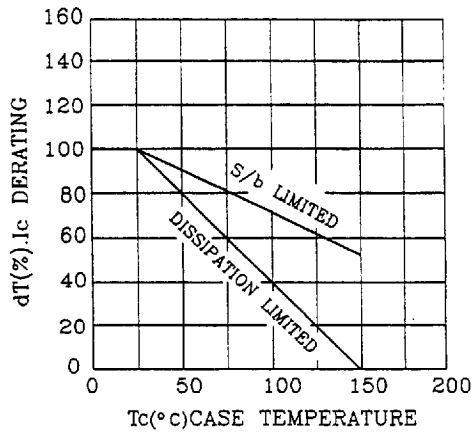
**h<sub>FE</sub>(2) CLASSIFICATION**

Classification	R	O	Y	G
h <sub>FE</sub> (2)	60-120	100-200	160-320	200-400





**DERATING CURVE OF SAFE OPERATING AREAS**



**POWER DERATING**

