



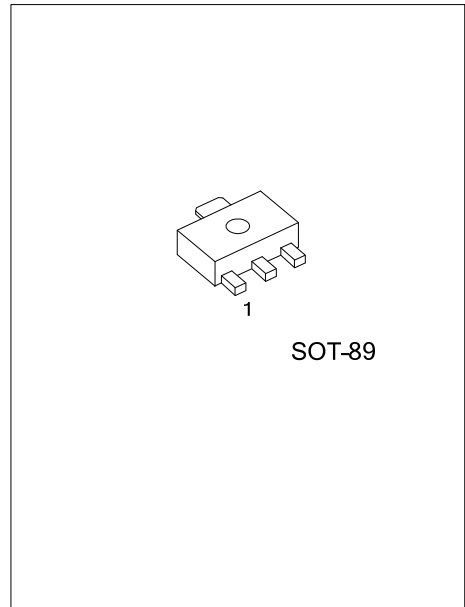
2SD1898

NPN SILICON TRANSISTOR

POWER TRANSISTOR

■ **FEATURES**

- *High $V_{CE0} = 80V$
- *High $I_C = 1A$ (DC)
- *Good h_{FE} linearity.
- *Low $V_{CE(SAT)}$
- *Complements the 2SB1260.



■ **ORDERING INFORMATION**

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
2SD1898L-x-AB3-R	2SD1898G-x-AB3-R	SOT-89	B	C	E	Tape Reel

Note: Pin Assignment: B: Base C: Collector E: Emitter

<p>2SD1898L-x-AB3-R</p> <p>(1)Packing Type (2)Package Type (3)Rank (4)Lead Free</p>	<p>(1) R: Tape Reel (2) AB3: SOT-89 (3) x: refer to Classification of h_{FE} (4) G: Halogen Free, L: Lead Free</p>
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■ ABSOLUTE MAXIMUM RATINGS ($T_A=25^{\circ}\text{C}$, unless otherwise specified)

PARAMETER	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	100	V
Collector-Emitter Voltage	V_{CEO}	80	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current(DC)	I_C	1	A
Collector Current(PULSE) (Note 2)	I_{CP}	2	A
Collector Power Dissipation (Note 3)	P_c	0.5	W
Collector Power Dissipation (Note 3)	P_c	2	W
Junction Temperature	T_J	150	$^{\circ}\text{C}$
Storage Temperature	T_{STG}	-55 ~ +150	$^{\circ}\text{C}$

Note: 1. Absolute maximum ratings are those values beyond which the device could be permanently damaged.

Absolute maximum ratings are stress ratings only and functional device operation is not implied.

2. Duty=1/2, Pw=200ms
3. When mounted on a 40*40*0.7 mm ceramic board.

■ ELECTRICAL CHARACTERISTICS ($T_A=25^{\circ}\text{C}$, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector Base Breakdown Voltage	BV_{CBO}	$I_C=50\mu\text{A}$	100			V
Collector Emitter Breakdown Voltage	BV_{CEO}	$I_C=1\text{mA}$	80			V
Emitter Base Breakdown Voltage	BV_{EBO}	$I_E=50\mu\text{A}$	5			V
Collector Cut-Off Current	I_{CBO}	$V_{CB}=80\text{V}, I_E=0\text{A}$			1	μA
Emitter Cut-Off Current	I_{EBO}	$V_{EB}=4\text{V}, I_C=0\text{A}$			1	μA
DC Current Transfer Ratio	h_{FE}	$V_{CE}=3\text{V}, I_C=0.5\text{A}$	82		390	
Collector-Emitter Saturation Voltage	$V_{CE(SAT)}$	$I_C=500\text{mA}, I_B=20\text{mA}$		0.15	0.4	V
Transition Frequency	f_T	$V_{CE}=10\text{V}, I_E=-50\text{mA}, f=100\text{MHz}$		100		MHz
Output Capacitance	C_{OB}	$V_{CB}=10\text{V}, I_E=0\text{A}, f=1\text{MHz}$		20		pF

■ CLASSIFICATION OF h_{FE}

RANK	P	Q	R
RANGE	82-180	120-270	180-390

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