

### **isc** Silicon NPN Power Transistor

# 2SD898

### DESCRIPTION

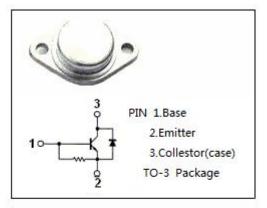
- High Breakdown Voltage-
- : V<sub>CBO</sub>= 1500V (Min)
- High Switching Speed
- Low Collector Saturation Voltage-
- : V<sub>CE(sat)</sub>= 5.0V(Max.)@ I<sub>C</sub>= 2.5A
- Built-in Damper Diode
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

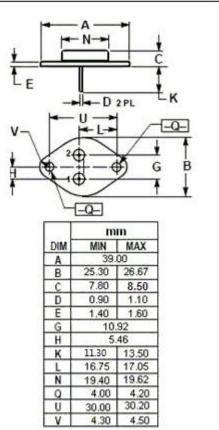
### APPLICATIONS

Designed for use in color TV deflection circuits.

### ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

SYMBOL	PARAMETER	VALUE	UNIT	
V <sub>CES</sub>	Collector- Emitter Voltage	1500	V	
V <sub>EBO</sub>	Emitter-Base Voltage	6	V	
Ic	Collector Current- Continuous	3	A	
I <sub>CM</sub>	Collector Current- Peak	3.5	A	
Pc	Collector Power Dissipation @ $T_c$ = 25 °C	50	W	
TJ	Junction Temperature	150	°C	
T <sub>stg</sub>	Storage Temperature Range	-45~150	°C	





## isc website: <u>www.iscsemi.com</u>



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### **ELECTRICAL CHARACTERISTICS**

#### $T_c=25^{\circ}C$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>EBO</sub>	Emitter-Base Breakdown Voltage	I <sub>E</sub> = 200mA; I <sub>C</sub> = 0	6.0			V
I <sub>CES</sub>	Collector Cutoff Current	V <sub>CE</sub> = 1500V ; V <sub>BE</sub> = 0			0.5	mA
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = 2.5A; I <sub>B</sub> = 0.8A			5.0	V
V <sub>BE</sub> (sat)	Base-Emitter Saturation Voltage	I <sub>C</sub> = 2.5A; I <sub>B</sub> = 0.8A			1.5	V
h <sub>FE</sub>	DC Current Gain	I <sub>C</sub> = 0.5A; V <sub>CE</sub> = 5V	8		36	
V <sub>ECF</sub>	C-E Diode Forward Voltage	I⊧= 3A			2.2	V
t <sub>f</sub>	Fall Time	I <sub>C</sub> = 2.75A, I <sub>B1</sub> = 0.6A , I <sub>B2</sub> = 1.3A			0.8	μ <b>S</b>

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