



# **isc Silicon NPN Power Transistor**

#### **DESCRIPTION**

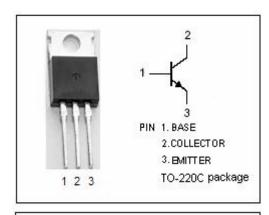
- · High Breakdown Voltage-
  - : V<sub>CBO</sub>= 1500V (Min)
- · High Reliability
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

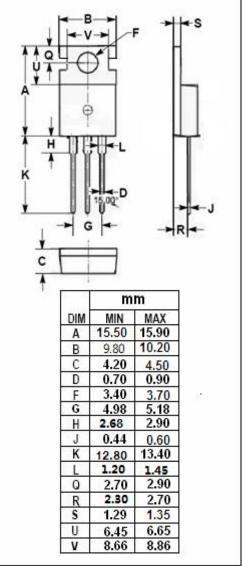
### **APPLICATIONS**

 Designed for line-operated horizontal deflection output applications.

# ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V <sub>CBO</sub>	Collector-Base Voltage	1500	V
V <sub>CES</sub>	Collector-Emitter Voltage	1500	٧
V <sub>EBO</sub>	Emitter-Base Voltage	5	V
Ic	Collector Current- Continuous	1	А
I <sub>CP</sub>	Collector Current-Pulse	2.5	А
Pc	Collector Power Dissipation @ T <sub>C</sub> ≤90°C	40	W
TJ	Junction Temperature	150	$^{\circ}$
T <sub>stg</sub>	Storage Temperature Range	-55~150	$^{\circ}$ C







### isc Silicon NPN Power Transistor

2SD1390

### **ELECTRICAL CHARACTERISTICS**

Tc=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>(BR)EBO</sub>	Emitter-Base Breakdown Voltage	I <sub>E</sub> = 1mA; I <sub>C</sub> = 0	5			V
V <sub>CE</sub> (sat)	Collector-Emitter Saturation Voltage	I <sub>C</sub> = 2A; I <sub>B</sub> = 1A			5.0	V
V <sub>BE</sub> (sat)	Base-Emitter Saturation Voltage	I <sub>C</sub> = 2A; I <sub>B</sub> = 1A			1.5	V
І <sub>сво</sub>	Collector Cutoff Current	V <sub>CB</sub> = 750V; I <sub>E</sub> = 0			50	μ <b>А</b>
		V <sub>CB</sub> = 1500V; I <sub>E</sub> = 0			1	mA
h <sub>FE</sub>	DC Current Gain	I <sub>C</sub> = 2A; V <sub>CE</sub> = 5V	2		7	
t <sub>f</sub>	Fall Time	1-250   -440   -40			1	μ <b>S</b>
t <sub>stg</sub>	Storage Time	I <sub>C</sub> = 2.5A, I <sub>Bend</sub> = 1.1A, L <sub>B</sub> = 10 μ H			11	μ \$

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