

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

## 2SD1451

### DESCRIPTION

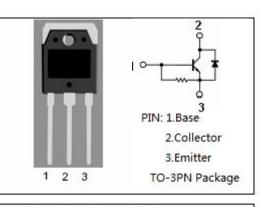
- High Breakdown Voltage-
- : V<sub>CBO</sub>= 1500V (Min)
- High Switching Speed
- Built-in Damper Diode
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

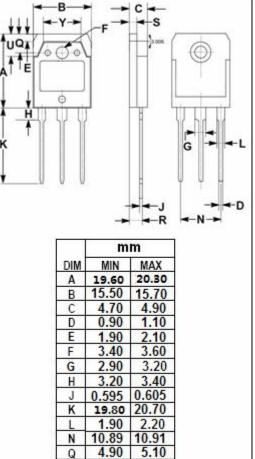
#### **APPLICATIONS**

• Designed for TV horizontal deflection output applications.

### ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
Vces	Collector-Emitter Voltage	1500	V
V <sub>EBO</sub>	Emitter-Base Voltage	6	V
lc	Collector Current-Continuous	1.5	A
Pc	Collector Power Dissipation @ $T_c$ = 25 °C	50	W
TJ	Junction Temperature	150	°C
T <sub>stg</sub>	torage Temperature Range -45~150		°C





3.35 3.45 1.995 2.100

5.90 6.20

9.90 10.10

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### **ELECTRICAL CHARACTERISTICS**

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

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>(BR)EBO</sub>	Emitter-Base Breakdown Voltage	I <sub>E</sub> = 200mA; I <sub>C</sub> = 0	6			V
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = 1.2A; I <sub>B</sub> = 0.3A			5.0	V
V <sub>BE</sub> (sat)	Base-Emitter Saturation Voltage	I <sub>C</sub> = 1.2A; I <sub>B</sub> = 0.3A			1.5	V
I <sub>СВО</sub>	Collector Base Cutoff Current	V <sub>CB</sub> =1500V; I <sub>E</sub> = 0			0.5	mA
h <sub>FE</sub>	DC Current Gain	I <sub>C</sub> = 0.3A; V <sub>CE</sub> = 5V	6			
V <sub>ECF</sub>	C-E Diode Forward Voltage	I⊧= 1.5A			2.2	V

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