

**isc Silicon NPN Power Transistor**
**2SD950**
**DESCRIPTION**

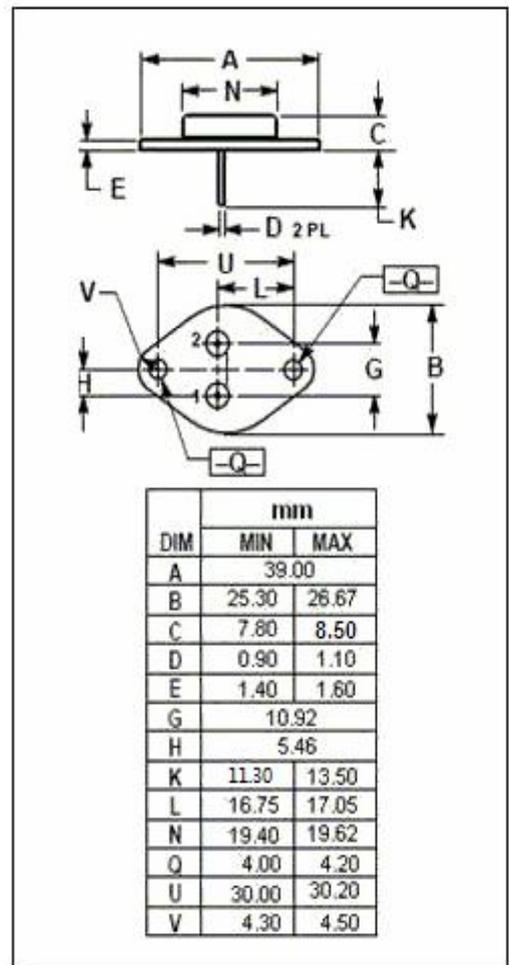
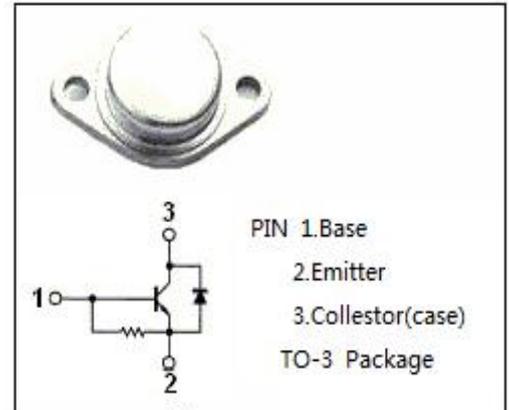
- High Breakdown Voltage-  
:  $V_{CBO} = 1500V$  (Min)
- Low Collector Saturation Voltage-  
:  $V_{CE(sat)} = 5.0V$  (Max.) @  $I_C = 2A$
- Built-in Damper Diode
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**APPLICATIONS**

- Designed for line-operated horizontal deflection output applications.

**ABSOLUTE MAXIMUM RATINGS ( $T_a = 25^\circ C$ )**

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	1500	V
$V_{CES}$	Collector-Emitter Voltage	1500	V
$V_{EBO}$	Emitter-Base Voltage	5	V
$I_C$	Collector Current- Continuous	3	A
$I_{CP}$	Collector Current- Peak	4.5	A
$P_C$	Collector Power Dissipation @ $T_C = 25^\circ C$	42	W
$T_J$	Junction Temperature	130	$^\circ C$
$T_{stg}$	Storage Temperature Range	-65~130	$^\circ C$



## isc Silicon NPN Power Transistor

## 2SD950

## ELECTRICAL CHARACTERISTICS

T<sub>c</sub>=25°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	5.0			V
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = 2A; I <sub>B</sub> = 0.75A			5.0	V
V <sub>BE(sat)</sub>	Base-Emitter Saturation Voltage	I <sub>C</sub> = 2A; I <sub>B</sub> = 0.75A			1.5	V
I <sub>CBO</sub>	Collector Cutoff Current	V <sub>CB</sub> = 750V; I <sub>E</sub> = 0			50	μA
		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> = 10V	3		8	
V <sub>ECF</sub>	C-E Diode Forward Voltage	I <sub>F</sub> = 4A			1.7	V
t <sub>stg</sub>	Storage Time			11		μs
t <sub>r</sub>	Fall Time	I <sub>C</sub> = 2A, I <sub>Bend</sub> = 0.75A; L <sub>B</sub> = 10 μH			0.9	μs

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