

## **INCHANGE SEMICONDUCTOR**

## **isc Silicon NPN Power Transistor**

## 2SC4963

### DESCRIPTION

- High Breakdown Voltage
- High Switching Speed
- · Built in damper diode
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

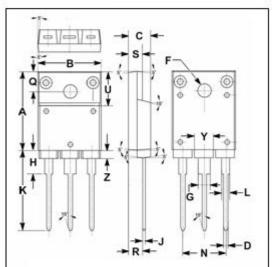
#### **APPLICATIONS**

 Very high-definition CRT display horizontal deflection output applications

ABSOLUTE MAXIMUM RATINGS(Ta=25℃)							
SYMBOL	PARAMETER	VALUE	UNIT				
V <sub>CBO</sub>	Collector-Base Voltage	1700	V				
V <sub>CEO</sub>	Collector-Emitter Voltage	800	V				
V <sub>EBO</sub>	Emitter-Base Voltage	5	V				
lc	Collector Current-Continuous	8	A				
I <sub>CP</sub>	Collector Current-Peak	16	A				
Pc	Collector Power Dissipation @ $T_a=25^{\circ}C$	5.0	W				
	Collector Power Dissipation @ $T_c$ =25 °C	50					
TJ	Junction Temperature	150	°C				
T <sub>stg</sub>	Storage Temperature Range	-55~150	Ĉ				

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# PIN 1. BASE 2.COLLECTOR 3. BMITTER TO-3PML package



1	m	m
DIM	MIN	MAX
Α	19.90	20.10
В	15.90	16.10
С	5.50	5.70
D	0.90	1.10
F	3.30	3.50
G	2.90	3.10
Н	5.90	6.10
J	0.595	0.605
K	22.30	22.50
L	1.90	2.10
Ν	10.80	11.00
0	4.90	5.10
R	3.75	3.95
S	3.20	3.40
U	9.90	10.10
Y	4.70	4.90
Z	1.90	2.10



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## **ELECTRICAL CHARACTERISTICS**

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

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	МАХ	UNIT
V <sub>CEO(SUS)</sub>	Collector-Emitter Sustaining Voltage	I <sub>C</sub> = 30mA; I <sub>B</sub> = 0	800			V
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = 7A; I <sub>B</sub> = 1.4A			5.0	V
V <sub>BE(sat)</sub>	Base-Emitter Saturation Voltage	I <sub>C</sub> = 7A; I <sub>B</sub> = 1.4A			1.5	V
I <sub>CBO</sub>	Collector Cutoff Current	V <sub>CB</sub> = 800V ; I <sub>E</sub> = 0			10	μA
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = 5V ; I <sub>C</sub> = 0	50		250	uA
h <sub>FE-1</sub>	DC current gain	I <sub>C</sub> = 1A ; V <sub>CE</sub> = 5V	8			
h <sub>FE-2</sub>	DC current gain	I <sub>C</sub> = 7A ; V <sub>CE</sub> = 5V	5			



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