

# **isc** Silicon NPN Power Transistor

# KSC3503

#### DESCRIPTION

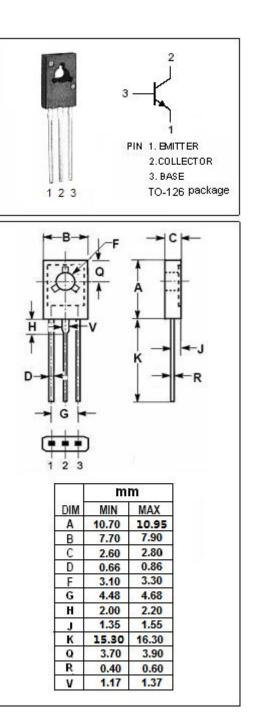
- Low Collector Saturation Voltage
- · High breakdown voltage
- Silicon NPN epitaxial planar transistor
- Small reverse transfer capacitance and excellent high frequency characteristic
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

#### **APPLICATIONS**

• For high definition CRT display ,video output

### ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V <sub>CBO</sub>	Collector-Base Voltage	300	V
V <sub>CEO</sub>	Collector-Emitter Voltage	300	V
V <sub>EBO</sub>	Emitter-Base Voltage	5	V
Ιc	Collector Current-Continuous	0.1	А
Pc	Collector Power Dissipation @ Tc=25°C	7	W
TJ	Junction Temperature	150	°C
T <sub>stg</sub>	Storage Temperature Range	-55~150	°C



isc website: www.iscsemi.com

1



## INCHANGE SEMICONDUCTOR

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### **ELECTRICAL CHARACTERISTICS**

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

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	МАХ	UNIT
V <sub>(BR)CBO</sub>	Collector-Base breakdown voltage	I <sub>C</sub> =1mA ; I <sub>B</sub> =0	300			V
V <sub>(BR)CEO</sub>	Collector-emitter breakdown voltage I <sub>C</sub> =10mA ; I <sub>B</sub> =0		300			V
V <sub>(BR)EBO</sub>	Emitter-base breakdown voltage I <sub>E</sub> =1mA ; I <sub>C</sub> =0		5			V
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> =20mA; I <sub>B</sub> = 2mA			0.6	V
V <sub>BE(sat)</sub>	Base-Emitter Saturation Voltage	I <sub>C</sub> =20mA; I <sub>B</sub> = 2mA			1.0	V
Ісво	Collector Cutoff Current	V <sub>CB</sub> = 300V ; I <sub>E</sub> = 0			1.0	μA
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = 5V; I <sub>C</sub> = 0			1.0	μA
h <sub>FE</sub>	DC Current Gain	I <sub>C</sub> = 10mA ; V <sub>CE</sub> = 10V	40		320	
f <sub>T</sub>	Current-Gain—Bandwidth Product	I <sub>E</sub> = -10mA; V <sub>CE</sub> = 30V		150		MHz

#### • h<sub>FE</sub> Classifications

С	D	E	F
40-80	60-120	100-200	160-320

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2