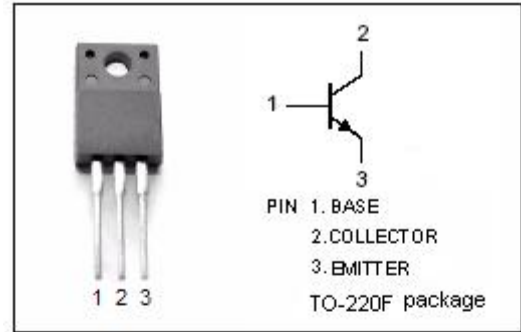


**isc Silicon NPN Power Transistor**
**2SC5147**
**DESCRIPTION**

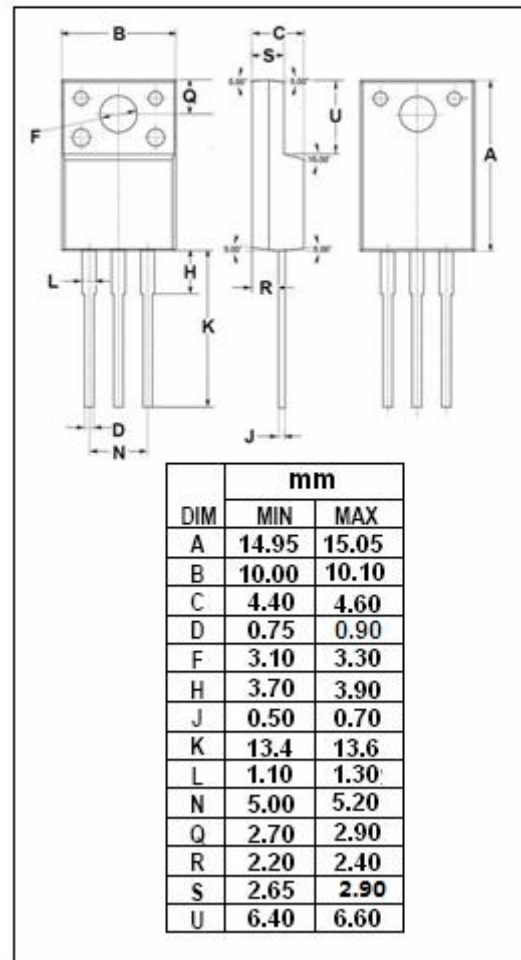
- High breakdown voltage( $BV_{ce0}=300V$ ).
- Low collector output capacitance(Typ.3pF@ $V_{ce}=30V$ ).
- Wide SOA(safe operating area)
- Ideal for color TV chroma output and amplification of video signals
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation


**APPLICATIONS**

- Designed for medium power transistor(Chroma Output)

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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	300	V
$V_{CEO}$	Collector-Emitter Voltage	300	V
$V_{EBO}$	Emitter-Base Voltage	5	V
$I_C$	Collector Current-Continuous	0.1	A
$P_C$	Collector Power Dissipation	2	W
	Collector Power Dissipation @ $T_c=25^{\circ}C$	10	
$T_J$	Junction Temperature	150	$^{\circ}C$
$T_{stg}$	Storage Temperature Range	-55~150	$^{\circ}C$



## isc Silicon NPN Power Transistor

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## ELECTRICAL CHARACTERISTICS

T<sub>c</sub>=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = 50mA; I <sub>B</sub> = 5mA			1	V
I <sub>CBO</sub>	Collector Cutoff Current	V <sub>CB</sub> = 200V; I <sub>E</sub> = 0			0.5	μ A
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = 4V; I <sub>C</sub> = 0			0.5	μ A
h <sub>FE</sub>	DC Current Gain	I <sub>C</sub> = 10mA; V <sub>CE</sub> = 10V	60		200	
f <sub>T</sub>	Current-Gain—Bandwidth Product	I <sub>E</sub> = -20mA; V <sub>CE</sub> = 30V	50	100		MHz
C <sub>OB</sub>	Output Capacitance	I <sub>E</sub> = 0; V <sub>CB</sub> = 30V; f <sub>test</sub> = 1.0MHz		3		pF

**NOTICE:**

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