

**Silicon NPN Power Transistor**
**2N5192G**
**DESCRIPTION**

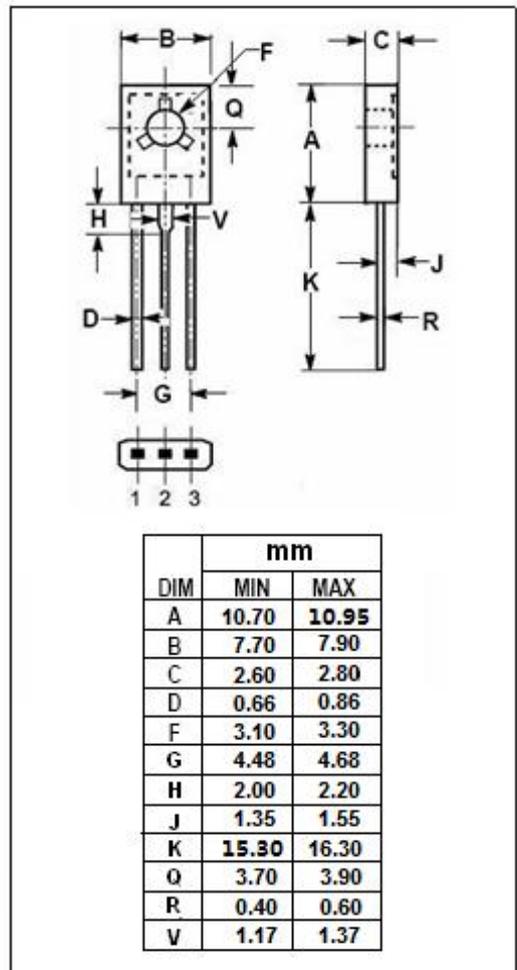
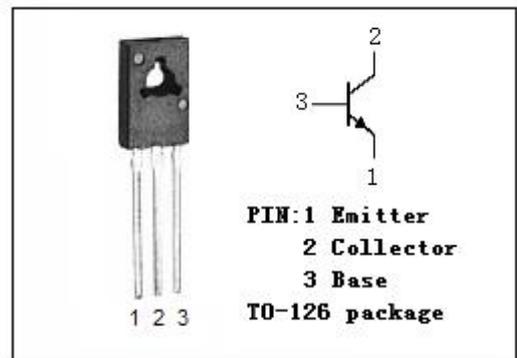
- Collector-Emitter Breakdown Voltage  
 $-V_{(BR)CEO} = 80V(\text{Min})$
- Collector-Emitter Saturation Voltage  
 $-V_{CE(sat)} : 1.4V(\text{Max}) @ I_C = 4A$

**ABSOLUTE MAXIMUM RATINGS(Ta=25°C)**

SYMBOL	PARAMETER	VALUE	UNIT
V <sub>CBO</sub>	Collector-Base Voltage	80	V
V <sub>CEO</sub>	Collector-Emitter Voltage	80	V
V <sub>EBO</sub>	Emitter-Base Voltage	5	V
I <sub>C</sub>	Collector Current	4	A
I <sub>B</sub>	Base Current	1	A
P <sub>C</sub>	Total Power Dissipation @ T <sub>C</sub> =25°C	40	W
T <sub>J</sub>	Junction Temperature	150	°C
T <sub>stg</sub>	Storage Temperature Range	-65~150	°C

**THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
R <sub>th j-c</sub>	Thermal Resistance, Junction to Case	3.12	°C/W



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**ELECTRICAL CHARACTERISTICS (T<sub>C</sub>=25°C unless otherwise specified)**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
V <sub>(BR)CEO</sub>	Collector-Emitter Breakdown Voltage	I <sub>C</sub> = 10mA, I <sub>B</sub> = 0	80	--	--	V
I <sub>CEO</sub>	Collector Cutoff Current	V <sub>CE</sub> = 80V, I <sub>B</sub> = 0	--	--	1	mA
I <sub>CBO</sub>	Collector Cutoff Current	V <sub>CB</sub> = 80V, I <sub>E</sub> = 0	--	--	0.1	mA
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = 5V, I <sub>C</sub> = 0	--	--	1	mA
h <sub>FE1</sub>	DC Current Gain	I <sub>C</sub> = 1.5A, V <sub>CE</sub> = 2V	20	--	80	
h <sub>FE2</sub>	DC Current Gain	I <sub>C</sub> = 4A, V <sub>CE</sub> = 2V	7	--	--	
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> =1.5A, I <sub>B</sub> = 0.15A	--	--	0.6	V
		I <sub>C</sub> =4.0A, I <sub>B</sub> = 1A	--	--	1.4	
V <sub>BE(on)</sub>	Base-Emitter On Voltage	V <sub>CE</sub> = 2V, I <sub>C</sub> = 1A	--	--	1.2	V

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