

**isc Silicon NPN Power Transistor**

**NJD35N04T4G**

**DESCRIPTION**

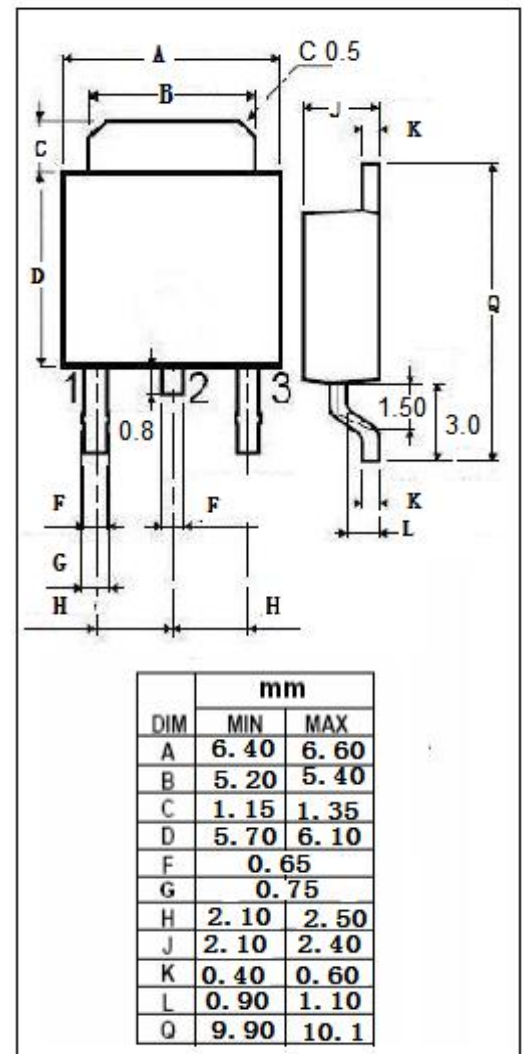
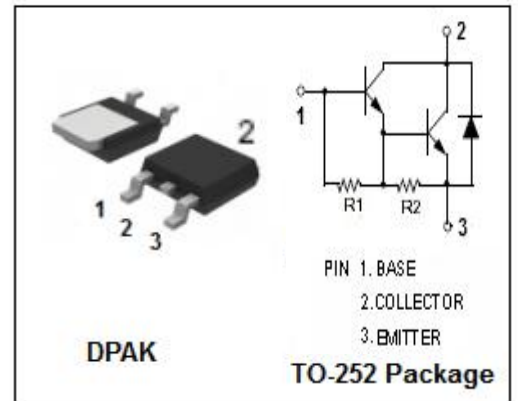
- With TO-252(DPAK) packaging
- Reliable performance at higher powers
- Designed for inductive loads
- Fast switching speed
- Very low current requirements
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**APPLICATIONS**

- Internal combustion engine ignition control
- Switching regulators
- Motor controls
- Light ballast
- Photo flash

**ABSOLUTE MAXIMUM RATINGS(T<sub>a</sub>=25°C)**

SYMBOL	PARAMETER	VALUE	UNIT
V <sub>CBO</sub>	Collector-Base Voltage	700	V
V <sub>CEO</sub>	Collector-Emitter Voltage	350	V
V <sub>EBO</sub>	Emitter-Base Voltage	5	V
I <sub>C</sub>	Collector Current-Continuous	4	A
I <sub>CM</sub>	Max.Collector Current-Continuous	8	A
I <sub>B</sub>	Base Current-Continuous	0.5	A
P <sub>D</sub>	Collector Power Dissipation @T <sub>c</sub> =25°C	45	W
T <sub>J</sub>	Junction Temperature	150	°C
T <sub>stg</sub>	Storage Temperature Range	-65~150	°C



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**ELECTRICAL CHARACTERISTICS**

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

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
BV <sub>CBO</sub>	Collector-Base Breakdown Voltage	I <sub>c</sub> =0.1mA; I <sub>E</sub> =0	700			V
BV <sub>CEO</sub>	Collector-Emitter Breakdown Voltage	I <sub>c</sub> =10mA; I <sub>B</sub> =0	350			V
BV <sub>EBO</sub>	Emitter-Base Breakdown Voltage	I <sub>E</sub> =0.1mA; I <sub>C</sub> =0	5			V
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>c</sub> =2A; I <sub>B</sub> =20mA			1.5	V
V <sub>BE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>c</sub> =2A; I <sub>B</sub> =20mA			2.0	V
V <sub>BE(on)</sub>	Collector-Emitter On Voltage	I <sub>c</sub> =2A; V <sub>CE</sub> =2.0V			2.0	V
I <sub>CEO</sub>	Collector Cutoff Current	V <sub>CE</sub> = 300V; I <sub>B</sub> = 0			50	mA
I <sub>CES</sub>	Collector Cutoff Current	V <sub>CB</sub> = 500V; I <sub>B</sub> = 0			50	mA
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = 5V; I <sub>C</sub> =0			5	mA
h <sub>FE-1</sub>	DC Current Gain	I <sub>c</sub> = 2A ; V <sub>CE</sub> = 2V	2000			
h <sub>FE-2</sub>	DC Current Gain	I <sub>c</sub> = 4A ; V <sub>CE</sub> = 2V	300			

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