

# **isc Silicon NPN Power Transistor**

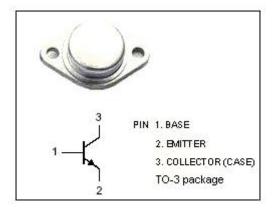
# 2SC3214

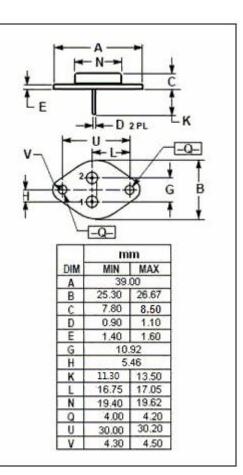
### DESCRIPTION

- High Collector-Emitter Sustaining Voltage-
- : V<sub>CEO(SUS)</sub>= 800V (Min)
- High Switching Speed
- Large safe operating area
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

#### **APPLICATIONS**

• Designed for switching regulators,Motor controls,Ultrasonic Oscillators.





## ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

SYMBOL	PARAMETER	МАХ	UNIT	
Vсво	Collector-Base Voltage 120		V	
V <sub>CEO</sub>	Collector-Emitter Voltage	800	V	
V <sub>EBO</sub>	Emitter-Base Voltage	7	V	
lc	Collector Current-Continuous	5	А	
Pc	Collector Power Dissipation @Tc=25°C	80	w	
Tj	Junction Temperature	150	°C	
T <sub>stg</sub>	Storage Temperature Range	-45~150	°C	

isc website: <u>www.iscsemi.com</u>



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# ELECTRICAL CHARACTERISTICS

 $T_{\text{c}}\text{=}25\,^{\circ}\!\!\!\!^{\circ}_{\circ}$  unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	МАХ	UNIT
V <sub>CEO(SUS)</sub>	Collector-Emitter Sustainig Voltage	I <sub>C</sub> = 10mA; I <sub>B</sub> =0	800			V
V(BR)EBO	Emitter-Base Breakdown Voltage	I <sub>E</sub> = 10mA; I <sub>C</sub> = 0	7			V
V <sub>CE</sub> (sat)	Collector-Emitter Saturation Voltage	I <sub>C</sub> = 2.5A; I <sub>B</sub> = 1.0A			2.0	V
V <sub>BE(sat)</sub>	Base-Emitter Saturation Voltage	I <sub>C</sub> = 2.5A; I <sub>B</sub> = 1.0A			1.5	V
h <sub>FE-1</sub>	DC Current Gain	I <sub>C</sub> = 1.0A; V <sub>CE</sub> = 5V		20		
І <sub>сво</sub>	Collector Cutoff Current	V <sub>CB</sub> = 1200V; I <sub>E</sub> = 0			0.1	mA
Ісео	Collector Cutoff Current	V <sub>CE</sub> = 800V; R <sub>BE</sub> = ∞			0.1	mA

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