



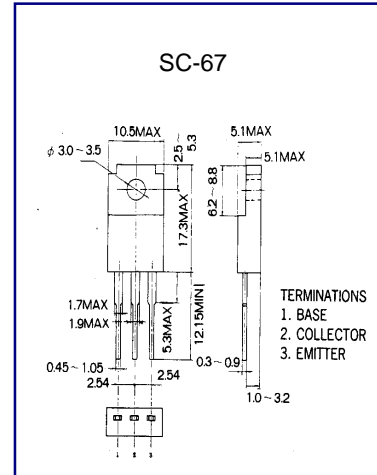
# 2SC5416LS

# NPN SILICON TRANSISTOR

**HIGH VOLTAGE POWER  
SWITCHING APPLICATIONS**

### ABSOLUTE MAXIMUM RATINGS(T<sub>A</sub>=25°C)

Characteristic	Symbol	Rating	Unit
Collector-Emitter Voltage	V <sub>CE0</sub>	1000	V
Collector-Emitter Voltage	V <sub>CEO</sub>	450	V
Emitter-Base Voltage	V <sub>EB0</sub>	9	V
Collector Current (DC)	I <sub>C</sub>	4	A
Collector Current (Pulse)	I <sub>C</sub>	8	A
Base Current (DC)	I <sub>B</sub>	2	A
Base Current (Pulse)	I <sub>B</sub>	4	A
Collector Dissipation (T <sub>c</sub> =25°C)	P <sub>C</sub>	100	W
Junction Temperature	T <sub>j</sub>	150	°C
Storage Temperature	T <sub>stg</sub>	-65~150	°C



### ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C)

Characteristic	Symbol	Test Condition	Min	Typ	Max	Unit
Collector Emitter Sustaining Voltage	V <sub>CE0(SUS)</sub>	I <sub>C</sub> =100mA, I <sub>B</sub> =0	450			V
Collector Cutoff Current	I <sub>CES</sub>	V <sub>CE</sub> =850V, V <sub>EB</sub> =0			1	mA
Emitter Cutoff Current	I <sub>EB0</sub>	V <sub>CE</sub> =1000V, V <sub>EB</sub> =0			1	mA
DC Current Gain	h <sub>FE</sub>	V <sub>EB</sub> =9V, I <sub>C</sub> =0	30		10	μA
Collector Emitter Saturation Voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> =0.1A, V <sub>CE</sub> =5V			50	V
Fall Time	tf	I <sub>C</sub> =2.5A, I <sub>B</sub> =0.5A			1.5	μS
					0.15	μS