

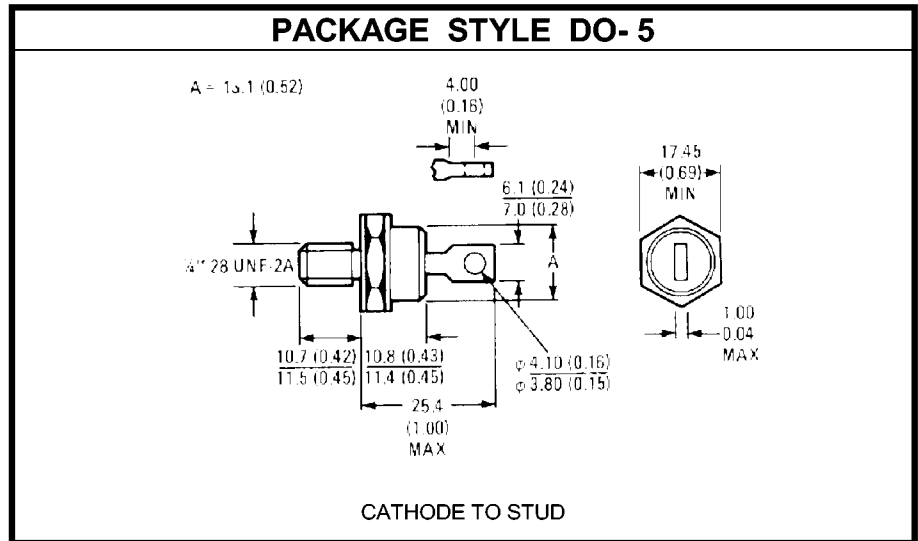
# SILICON RECTIFIER-VERY FAST SWITCHING

**DESCRIPTION:**

The **1N5409** is Designed for General Purpose Very Fast Switching Power Supply Applications.

**MAXIMUM RATINGS**

<b>I<sub>o</sub></b>	47 A (RMS) @ T <sub>C</sub> = 25 °C 30 A (AVG) @ T <sub>C</sub> = 100 °C
<b>V<sub>RWM</sub></b>	175 V
<b>T<sub>J</sub></b>	-65 °C to +175 °C
<b>T<sub>STG</sub></b>	-65 °C to +175 °C
<b>θ<sub>JC</sub></b>	1.5 °C/W


**CHARACTERISTICS** T<sub>C</sub> = 25 °C

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
<b>V<sub>BR</sub></b>	I <sub>R</sub> = 1.0 mA	175			V
<b>I<sub>R</sub></b>	V <sub>R</sub> = 150 V T <sub>J</sub> = 100 °C			10 5.0	μA mA
<b>VF</b>	I <sub>F</sub> = 60 A I <sub>F</sub> = 30 A T <sub>J</sub> = 100 °C			1.6 1.2	V
<b>t<sub>rr</sub></b>	I <sub>F</sub> = 1.0 A      V <sub>R</sub> = 30 V			70	nS
<b>I<sub>FSM</sub></b>	(Non repetitive)    1/2 SINE-WAVE t = 1.0 mS T <sub>J</sub> = 100 °C			200	A