

# $\mu$ A78G • $\mu$ A79G 4-Terminal Adjustable Voltage Regulators

Linear Products

### Description

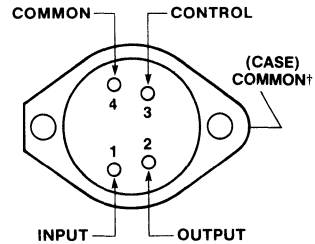
The  $\mu$ A78G and  $\mu$ A79G are 4-Terminal Adjustable Voltage Regulators. They are designed to deliver continuous load currents of up to 1.0 A with a maximum input voltage of 40 V for the positive regulator 78G and -40 V for the negative regulator 79G. Output current capability can be increased to greater than 1.0 A through use of one or more external transistors. The output voltage range of the 78G positive voltage regulator is 5 V to 30 V and the output voltage range of the negative 79G is -30 V to -2.2 V. For systems requiring both a positive and negative, the 78G and 79G are excellent for use as a dual tracking regulator with appropriate external circuitry. These 4-terminal voltage regulators are constructed using the Fairchild Planar process.

- **OUTPUT CURRENT IN EXCESS OF 1 A**
- **$\mu$ A78G POSITIVE OUTPUT 5 TO 30 V**
- **$\mu$ A79G NEGATIVE OUTPUT -30 TO -2.2 V**
- **INTERNAL THERMAL OVERLOAD PROTECTION**
- **INTERNAL SHORT CIRCUIT PROTECTION**
- **OUTPUT TRANSISTOR SAFE-AREA PROTECTION**
- **MILITARY AND COMMERCIAL VERSIONS**
- **4-PIN TO-202 TYPE AND 4-PIN TO-3**

### Absolute Maximum Ratings

Input Voltage	
$\mu$ A78G, $\mu$ A78GC	40 V
$\mu$ A79G, $\mu$ A79GC	-40 V
Control Pin Voltage	
$\mu$ A78G, $\mu$ A78GC	$0 \leq V \leq V_{OUT}$
$\mu$ A79G, $\mu$ A79GC	$-V_{OUT} \leq -V \leq 0$
Power Dissipation	
Operating Junction	
Temperature Range	Internally Limited
Military ( $\mu$ A78G, $\mu$ A79G)	-55°C to 150°C
Commercial ( $\mu$ A78GC, $\mu$ A79GC)	0°C to 150°C
Storage Temperature Range	
4-Pin Power Watt (U1)	-55°C to +150°C
4-Pin TO-3 (K)	-65°C to +150°C
Pin Temperature (Soldering)	
4-Pin Power Watt (U1) (10 s)	230°C
4-Pin TO-3 (K) (60 s)	300°C

### $\mu$ A78G Connection Diagram TO-3 Package



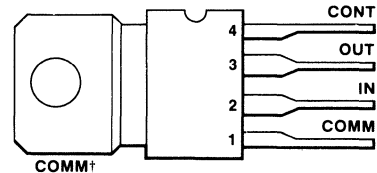
(Top View)

Heat sink tabs connected to common through device substrate.

### Order Information

Type	Package	Code	Part No.
$\mu$ A78G	TO-3	GK	$\mu$ A78GKM
$\mu$ A78GC	TO-3	GK	$\mu$ A78GKC

### $\mu$ A78G Connection Diagram Power Watt Package



(Side View)

Heat sink tabs connected to common through device substrate.

### Order Information

Type	Package	Code	Part No.
$\mu$ A78GC	Power Watt	8Z	$\mu$ A78GU1C