



## UniTools® Simple Solutions for Microphone Applications

Scroll down for general information on UniTools. Or select a model number for detailed product information.

[AT8682 UniGate®](#)   [AT8685 UniTrap®](#)  
[AT8683 UniSteep®](#)   [AT8686 UniLim®](#)

### General Specifications<sup>1</sup>

Input/Output Connections	XLRF/XLRM-type
Phantom Power	24-48V DC, 2-4 mA typical
Frequency Response	20-20,000 Hz
Gain	Unity (0 dB), +0/-1.5 dB
Noise (A-weighted)	-115 dBV typical
Weight	8.8 oz (250 grams) typical
Dimensions	5.12" (130.0 mm) W x 2.36" (60.0 mm) D x 1.73" (44.0 mm) H typical

<sup>1</sup>Measured at 48V phantom power, 150 ohms input load and 100,000 ohms output load. Specifications apply to all models except as noted below.

### AT8682 UniGate® Voice-operated Switch with Adjustable Threshold



Automatically attenuates a channel by 10 dB (typical) when microphone is not in use. LED indicates when gate is open. The Threshold control sets the reference level that must be exceeded for a microphone to be considered "in use," and can be adjusted to keep background noise level from triggering the microphone.

**AT8682 Specifications**

Input Impedance	2,500 ohms
Output Impedance	460 ohms
Maximum Input Level	+6 dBV (1% T.H.D. at 1 kHz)
Frequency Response	25-20,000 Hz
Gate Attenuation	10 dB typical
Minimum Threshold	-85 dBV

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**AT8683 UniSteep®  
80 Hz Mic Hi-pass Filter**


Provides a steep low-frequency attenuation to improve the quality of sound pickup under difficult conditions without affecting voice quality. Useful for minimizing background ambience, air conditioning rumble, mechanical noise and other undesired low-frequency sounds.

**AT8683 Specifications**

Input Impedance	2,100 ohms
Output Impedance	150 ohms
Maximum Input Level	+3 dBV (1% T.H.D. at 1 kHz)
Frequency Response	80-20,000 Hz
Corner Frequency	80 Hz
Low-frequency Roll-off	18 dB/octave

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**AT8685 UniTrap®  
Constant-Q Mic Notch Filter with Adjustable Frequency**


Tunable notch filter attenuates a narrow frequency band that is susceptible to feedback. A notch 30 dB deep tunes in two ranges for more precise control.

**AT8685 Specifications**

Input Impedance	2,500 ohms
Output Impedance	300 ohms
Maximum Input Level	-7 dBV (1% T.H.D. at 1 kHz)
Notch Frequency Range	LO 100-1,000 Hz HI 1,000-10,000 Hz
Notch Rejection	30 dB typical

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**AT8686 UniLim<sup>®</sup>  
Mic Limiter with Adjustable Threshold**



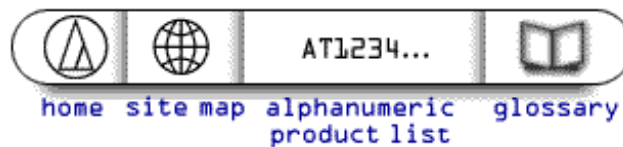
Keeps the output of a microphone from exceeding a desired level. This function serves to set maximum level in a mic channel and prevent the overloading of mixer input stages.

**AT8686 Specifications**

Input Impedance	6,000 ohms
Output Impedance	80 ohms
Maximum Input Level	+20 dBV (1% T.H.D. at 1 kHz)
Maximum Attenuation	-55 dBV to -20 dBV

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[Conditions and Warranty](#)  
[Specification Sheet \(pdf - 142KB\)](#)



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