AC Coupled	oupled Peak Voltages		Display Readings			DC and AC
Input			AC Component Only		DC	Total rms
Waveform	PK - PK	0 - PK	rms CAL*	8062A	Component only	TRUE RMS = $\sqrt{ac^2 + dc^2}$
Sine PK PK-PK	2.828	1.414	1.000	1.000	0.000	1.000
Rectified Sine (Full Wave) PK PK-PK	1.414	1.414	0.421	0.435	0.900	1.000
Rectified Sine (Half Wave)	2.000	2.000	0.764	0.771	0.636	1.000
Square PK 0 PK-PK	2.000	1.000	1.110	1.000	0.000	1.000
Rectified Square PK PK-PK 1	1.414	1.414	0.785	0.707	0.707	1.000
Rectangular Pulse PK O Y D = X/Y K = \(\forall D - D^2 \)	2.000	2.000	2.22K	2K	2D	$2\sqrt{\mathrm{D}}$
Triangle Sawtooth PK 0 PK-PK	3.464	1.732	0.960	1.000	0.000	1.000

Figure 2-8. Multiplication Factors for Converting Waveforms

rms CAL is the displayed value for average responding meters that are calibrated to display rms for sine waves.

Since average-responding meters have been in use for so long, you may have accumulated test or reference data based on them. The conversion factors in Figure 2-8 should help you convert between the two measurement methods.

2-15. High Impedance DC Voltage

Occasionally you may want to make dc voltage measurements in high impedance circuitry where even the 10 M Ω input impedance for the normal dc voltage function could load the circuit and cause significant errors. For example, a 10 M Ω input impedance causes a 0.1% error when measuring the voltage across the 10 k Ω leg of a 90 k Ω over 10 k Ω voltage divider. The 8060A offers a >1,000 M Ω (typically >10,000 M Ω) input impedance dc voltage function which greatly reduces this error.