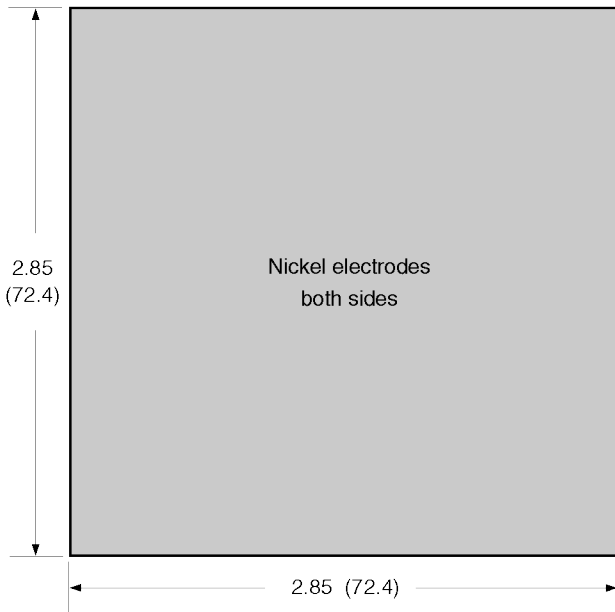


### PSI-5A4E PIEZOELECTRIC SINGLE SHEETS



PART NUMBER	THICKNESS	CAPACITANCE
	mm	nF (±10%)
T105-A4E-602	.127	650
T107-A4E-602	.191	430
T110-A4E-602	.267	315
T120-A4E-602	.508	162
T140-A4E-602	1.02	80
T180-A4E-602	2.03	40

.005 ± .0005	(.127 ± .013)
.0075 ± .0005	(.191 ± .013)
.0105 ± .0005	(.267 ± .013)
.020 ± .0005	(.508 ± .013)
.040 ± .0010	(1.016 ± .025)
.080 ± .0020	(2.032 ± .050)

#### PIEZOELECTRIC & MATERIAL PROPERTIES OF PSI-5A4E SINGLE SHEETS

##### PIEZOELECTRIC

Composition	Lead Zirconate Titanate	
Piezo Systems Material Designation	Type 5A4E (Industry Type 5A, Navy Type II)	
Relative Dielectric Constant (@1KHz)	$K^T_{33}$	1800
Piezoelectric Strain Coefficient	$d_{33}$	$390 \times 10^{-12}$ meter/Volt
	$d_{31}$	$-190 \times 10^{-12}$ meter/Volt
Piezoelectric Voltage Coefficient	$g_{33}$	$24.0 \times 10^{-3}$ Volt meter/Newton
	$g_{31}$	$-11.6 \times 10^{-3}$ Volt meter/Newton
Coupling Coefficient	$k_{33}$	0.72
	$k_{31}$	0.35
Polarization Field	$E_p$	$2 \times 10^6$ Volt/meter
Initial Depolarization Field	$E_c$	$5 \times 10^5$ Volt/meter

##### MECHANICAL

Density	$\rho$	7800	Kg/meter <sup>3</sup>
Mechanical Q		80	
Elastic Modulus	$Y^E_{33}$	$5.2 \times 10^{10}$	Newton/meter <sup>2</sup>
	$Y^E_{11}$	$6.6 \times 10^{10}$	Newton/meter <sup>2</sup>

##### THERMAL

Thermal Expansion Coefficient		$\sim 4 \times 10^{-6}$	meter/meter °C
Curie Temperature		350	°C

**ROHS** Compliant. Piezoceramic exempted from requirements of Article 4(1).

#### ORDERING INFORMATION

#### PART NO.

1 pc.

5 pc.

25 pc.

100 pc.

PSI-5A4E (2.85" Square x .005"T)	T105-A4E-602	\$110	\$77	\$55	\$39
PSI-5A4E (2.85" Square x .0075"T)	T107-A4E-602	\$110	\$66	\$44	\$39
PSI-5A4E (2.85" Square x .0105"T)	T110-A4E-602	\$110	\$77	\$55	\$33
PSI-5A4E (2.85" Square x .020"T)	T120-A4E-602	\$138	\$99	\$77	\$66
PSI-5A4E (2.85" Square x .040"T)	T140-A4E-602	\$165	\$120	\$99	\$88
PSI-5A4E (2.85" Square x .080"T)	T180-A4E-602	\$275	\$220	\$193	\$165