

Application Guide

Smart Meters

Passive Solutions Enabling Advance Metering Infrastructure

Power Supply

- Broad Product Offering

Metrology

- Ceramic MLCC
- Chip and Disc Varistor
- Film Capacitor
- Magnetics

Register / CPU

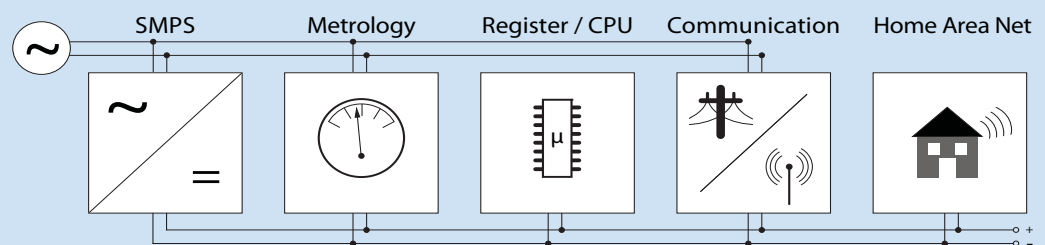
- Ceramic MLCC
- Chip Varistor
- Magnetic, EMI

Communications

- Ceramic MLCC
- Magnetic, EMI
- Magnetic, Inductor
- SAW Filter
- RF Components
- Chip Varistor

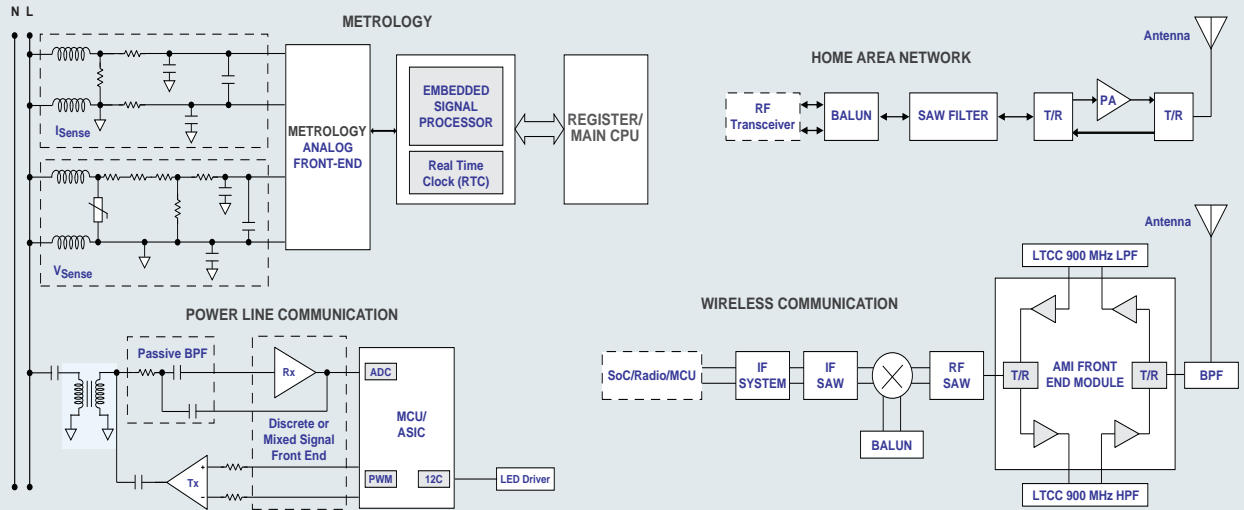
Home Area Networking

- Ceramic MLCC
- Magnetics
- Chip Varistor



TDK leading the way in Smart Meter Technology.

Schematic Circuit



Product Guide

Series	Technical Data	Features	Series / Type	Metrology	Register/CPU	Power Line Communication	Wireless Communication	Home Area Network
RF Components (Wireless)								
SAW: f_c 422.00 MHz	Usable Bandwidth [MHz]: 4.00	East European Frequency	B3911				•	
SAW: f_c 457.50 MHz	Usable Bandwidth [MHz]: 15.00	USA - Water, DTV Interference	B3906				•	
SAW: f_c 460.00 MHz	Usable Bandwidth [MHz]: 20.00	USA - Water	B3590				•	
SAW: f_c 868.30 MHz	Usable Bandwidth [MHz]: 0.30	EU - High RFID Suppression	B3734				•	
SAW: f_c 869.00 MHz	Usable Bandwidth [MHz]: 2.00	EU - Water, Gas, Electric	B3716				•	
SAW: f_c 915.00 MHz	Usable Bandwidth [MHz]: 26.00	USA - Increased Power Durability	B3588					
		USA - Attenuation at 894 MHz	B3728					
		Chip Size Package 1411	B4301					•
	Usable Bandwidth [MHz]: 10.00	USA - Narrow Band ISM	B3726					
SAW: f_c 942.50 MHz	Usable Bandwidth [MHz]: 35.00	Japan, USA Licensed Band	B3512				•	
SAW: f_c 944.00 MHz	Usable Bandwidth [MHz]: 32.00	USA - Ultra-wide Band	B3904				•	
SAW: f_c 2448.50 MHz	Usable Bandwidth [MHz]: 97.00	ZigBee Power Durability 20 dBm	B3912				•	•
Antenna	f: 915KHz, 2.5GHz	ISM Band, WLAN, GPS	ANT				•	•
Band Pass Filter / Diplexer	f: 2.5 / 5.0GHz, 900MHz	WLAN, ZigBee, ISM Band	DEA, DPX				•	
Ceramic Capacitors								
General, High Cap, Mid Voltage	C_P : up to 100 μ F, V_R : 4...630V	0201 to 2220 sizes	C	•	•	•	•	•
	C_P : up to 47 μ F, V_R : 6.3...630V	AEC-Q200, Extended Life	CGA, CGJ	•	•	•	•	•
	C_P : 0.047...100 μ F, V_R : 16...630V	Crack Mitigation	CKG	•	•	•	•	
Dipped, Radial Leaded	C_P : up to 100 μ F, V_R : 6.3...630V	Acoustic Noise Countermeasure	FK	•				
Safety Standard Approved	C_P : 0.0001...0.01 μ F	X1, Y1, Y2 250VAC	CD / CS	•				
Magnetics								
EMI Signal Line	I_R : 0.1...1.55A, $ Z $: 3...2500 Ω	Chip Bead, SMD: 01005...0805	MMZ	•				•
	I_R : 100...250mA, V_R : 3...10V	T & PI Filter, SMD: 0603...0805	MEM	•				
EMI Power Line	I_R : 0.5...6A, $ Z $: 10...1000 Ω	Chip Bead, SMD: 0201...0805	MPZ	•	•	•	•	•
	I_R : 1.5...6A, V_R : 20...50V	T Filter, SMD: 1206...1807	ACH	•	•	•		
Common Mode Choke	I_R : 1...10A, $ Z $: 90...1000 Ω	SMD: 0805...1812	ACM	•	•	•	•	•
Inductor	I_R : 50...1000mA, L_P : 0.3...1000nH	SMD: 0201...2220	MLx, MHQ, NLx					•
	I_R : 50...23000mA, L_P : 0.1...1000 μ H	SMD: 0402...2220	MLx, NLx, VLx, LTF, SLF, CLF	•	•	•		
Power Transformers	Power: up to 30W	Multi-output, Switching, Custom	SRW, ECO, B78			•		
Balun	f: 2.4 / 5.0GHz, 900MHz	SMD Package	HHM					•
Protection Devices								
Varistors	I_{pk} : 0.2...100A	Chip, SMD: 0201...0805	AVR-M	•	•	•	•	•
	I_{pk} : 100...1200A	CU type, SMD 3225...4032	B726xx (50,60)	•		•		