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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



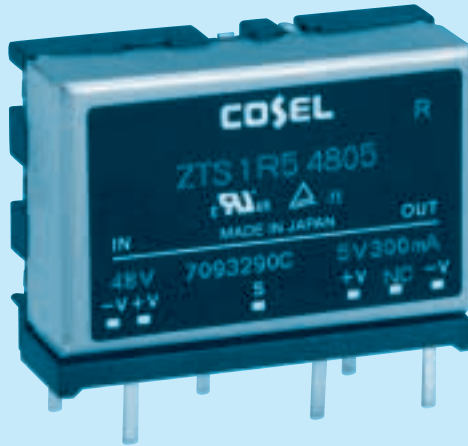
ZTS1R5

ZT S 1R5 12 05

① ② ③ ④ ⑤



- ① Series name
- ② Single output
- ③ Output wattage
- ④ Input voltage
- ⑤ Output voltage



MODEL	ZTS1R50505	ZTS1R50512	ZTS1R50515	ZTS1R51205	ZTS1R51212	ZTS1R51215	ZTS1R52405	ZTS1R52412	ZTS1R52415	ZTS1R54805	ZTS1R54812	ZTS1R54815
MAX OUTPUT WATTAGE[W]	1.50	1.56	1.50	1.50	1.56	1.50	1.50	1.56	1.50	1.50	1.56	1.50
DC OUTPUT	VOLTAGE[V]	5	12	15	5	12	15	5	12	15	5	12
	CURRENT[A]	0.30	0.13	0.10	0.30	0.13	0.10	0.30	0.13	0.10	0.30	0.13

SPECIFICATIONS

	MODEL	ZTS1R50505	ZTS1R50512	ZTS1R50515	ZTS1R51205	ZTS1R51212	ZTS1R51215	ZTS1R52405	ZTS1R52412	ZTS1R52415	ZTS1R54805	ZTS1R54812	ZTS1R54815	
INPUT	VOLTAGE[V]	DC4.5 - 9			DC9 - 18			DC18 - 36			DC36 - 72			
	CURRENT[A]	*1 0.441typ	0.459typ	0.441typ	0.176typ	0.183typ	0.176typ	0.088typ	0.092typ	0.088typ	0.043typ	0.045typ	0.043typ	
	EFFICIENCY[%]	*1 68typ	68typ	68typ	71typ	71typ	71typ	71typ	71typ	71typ	73typ	73typ	73typ	
OUTPUT	VOLTAGE[V]	5	12	15	5	12	15	5	12	15	5	12	15	
	CURRENT[A]	0.30	0.13	0.10	0.30	0.13	0.10	0.30	0.13	0.10	0.30	0.13	0.10	
	LINE REGULATION[mV]	20max	48max	60max	20max	48max	60max	20max	48max	60max	20max	48max	60max	
	LOAD REGULATION[mV]	40max	100max	120max	40max	100max	120max	40max	100max	120max	40max	100max	120max	
	RIPPLE[mVp-p]	*2 80max	120max	120max	80max	120max	120max	80max	120max	120max	80max	120max	120max	
	RIPPLE NOISE[mVp-p]	*2 120max	150max	150max	120max	150max	150max	120max	150max	150max	120max	150max	150max	
	TEMPERATURE REGULATION[mV]	-20 to +55°C	50max	150max	180max	50max	150max	180max	50max	150max	180max	50max	150max	180max
	DRIFT[mV]	*3 20max	48max	60max	20max	48max	60max	20max	48max	60max	20max	48max	60max	
	START-UP TIME[ms]	20max (Minimum input, Io=100%)												
	OUTPUT VOLTAGE ADJUSTMENT RANGE[V]	Fixed												
OUTPUT VOLTAGE SETTING[V]	4.85 - 5.25	11.40 - 12.60	14.25 - 15.75	4.85 - 5.25	11.40 - 12.60	14.25 - 15.75	4.85 - 5.25	11.40 - 12.60	14.25 - 15.75	4.85 - 5.25	11.40 - 12.60	14.25 - 15.75		
PROTECTION CIRCUIT	OVERCURRENT PROTECTION	Works over 105% of rating and recovers automatically												
ISOLATION	INPUT-OUTPUT	AC500V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (20±15°C)												
	INPUT-CASE	AC500V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (20±15°C)												
	OUTPUT-CASE	AC500V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (20±15°C)												
ENVIRONMENT	OPERATING TEMP.,HUMID.AND ALTITUDE	-20 to +71°C, 20 - 95%RH (Non condensing) (Refer to DERATING CURVE), 3,000m (10,000feet) max												
	STORAGE TEMP.,HUMID.AND ALTITUDE	-40 to +85°C, 20 - 95%RH (Non condensing), 9,000m (30,000feet) max												
	VIBRATION	10 - 55Hz, 98.0m/s ² (10G), 3minutes period, 60minutes each along X, Y and Z axis												
	IMPACT	490.3m/s ² (50G), 11ms, once each X, Y and Z axis												
SAFETY	AGENCY APPROVALS	UL60950-1, C-UL, EN60950-1 Complies with IEC60950-1												
OTHERS	CASE SIZE/WEIGHT	28×21×10mm (W×H×D) / 15g max												
	COOLING METHOD	Convection												

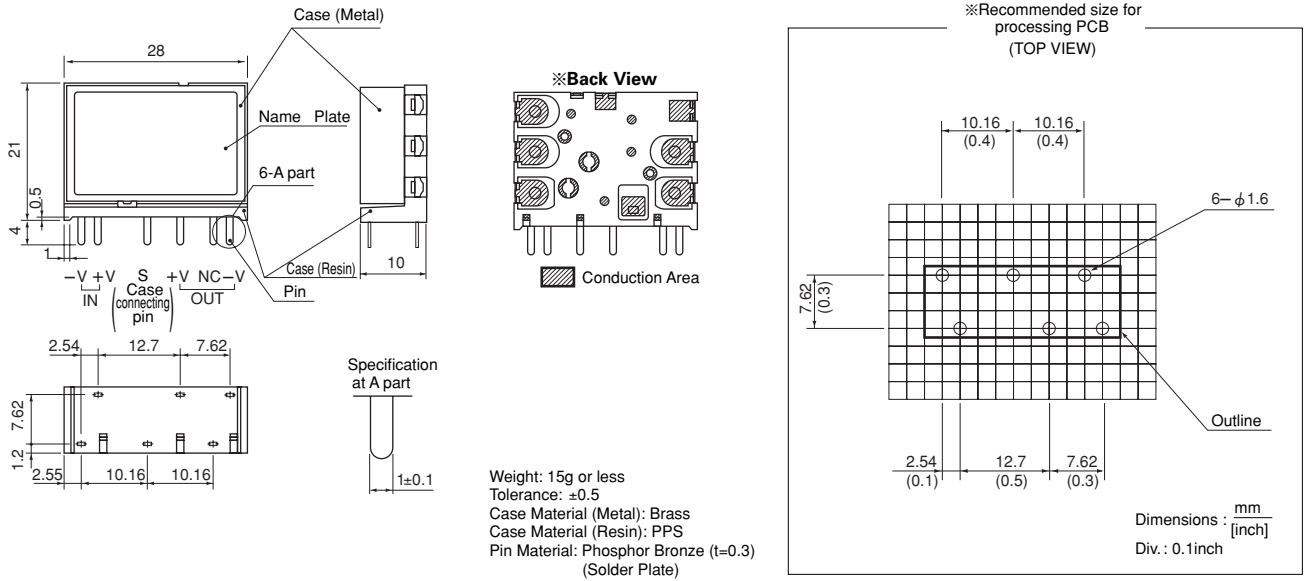
*1 Rated input. 5V, 12V, 24V or 48V DC, Io=100%

*2 Measured by 20MHz oscilloscope.

*3 The drift is a change at 25°C of ambient temperature and 30 minutes - 8 hours after the input voltage applied at rated input/output.

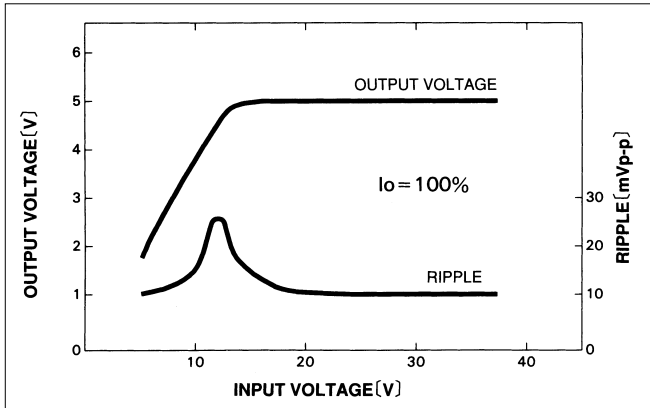
* Series/Parallel operation with other model is not possible.

External view

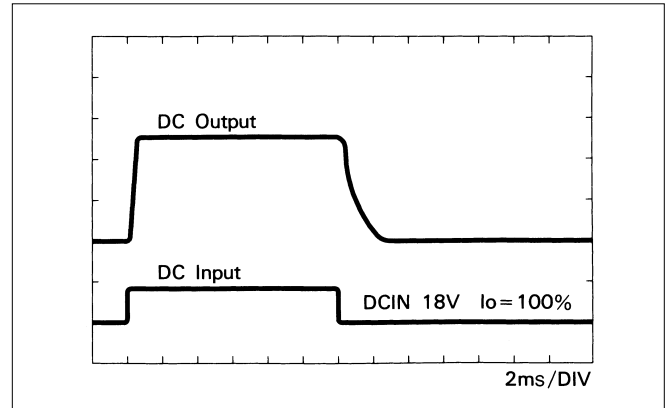


Performance data

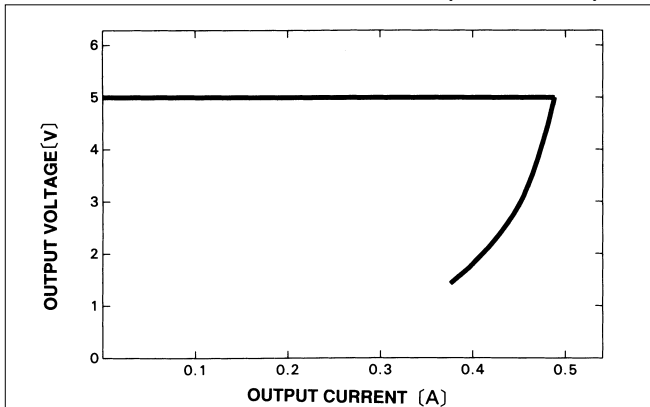
■ STATIC CHARACTERISTICS (ZTS1R52405)



■ RISE TIME & FALL TIME (ZTS1R52405)



■ OVERCURRENT CHARACTERISTICS (ZTS1R52405)



ZU/ZT

ZTS3

ZT S 3 12 05

① ② ③ ④ ⑤



- ① Series name
- ② Single output
- ③ Output wattage
- ④ Input voltage
- ⑤ Output voltage

MODEL	ZTS30505	ZTS30512	ZTS30515	ZTS31205	ZTS31212	ZTS31215	ZTS32405	ZTS32412	ZTS32415	ZTS34805	ZTS34812	ZTS34815	
MAX OUTPUT WATTAGE[W]	3	3	3	3	3	3	3	3	3	3	3	3	
DC OUTPUT	VOLTAGE[V]	5	12	15	5	12	15	5	12	15	5	12	15
	CURRENT[A]	0.60	0.25	0.20	0.60	0.25	0.20	0.60	0.25	0.20	0.60	0.25	0.20

SPECIFICATIONS

	MODEL	ZTS30505	ZTS30512	ZTS30515	ZTS31205	ZTS31212	ZTS31215	ZTS32405	ZTS32412	ZTS32415	ZTS34805	ZTS34812	ZTS34815	
INPUT	VOLTAGE[V]	DC4.5 - 9			DC9 - 18			DC18 - 36			DC36 - 72			
	CURRENT[A]	*1 0.896typ	0.857typ		0.357typ	0.338typ		0.176typ	0.167typ		0.088typ	0.082typ		
	EFFICIENCY[%]	*1 67typ	70typ	70typ	70typ	74typ	74typ	71typ	75typ	75typ	71typ	76typ	76typ	
OUTPUT	VOLTAGE[V]	5	12	15	5	12	15	5	12	15	5	12	15	
	CURRENT[A]	0.60	0.25	0.20	0.60	0.25	0.20	0.60	0.25	0.20	0.60	0.25	0.20	
	LINE REGULATION[mV]	20max	48max	60max	20max	48max	60max	20max	48max	60max	20max	48max	60max	
	LOAD REGULATION[mV]	40max	100max	120max	40max	100max	120max	40max	100max	120max	40max	100max	120max	
	RIPPLE[mVp-p]	*2 80max	120max	120max	80max	120max	120max	80max	120max	120max	80max	120max	120max	
	RIPPLE NOISE[mVp-p]	*2 120max	150max	150max	120max	150max	150max	120max	150max	150max	120max	150max	150max	
	TEMPERATURE REGULATION[mV]	-20 to +55°C	50max	150max	180max	50max	150max	180max	50max	150max	180max	50max	150max	180max
	DRIFT[mV]	*3 20max	48max	60max	20max	48max	60max	20max	48max	60max	20max	48max	60max	
	START-UP TIME[ms]	20max (Minimum input, I _o =100%)												
	OUTPUT VOLTAGE ADJUSTMENT RANGE[V]	Fixed												
OUTPUT VOLTAGE SETTING[V]	4.85 - 5.25	11.40 - 12.60	14.25 - 15.75	4.85 - 5.25	11.40 - 12.60	14.25 - 15.75	4.85 - 5.25	11.40 - 12.60	14.25 - 15.75	4.85 - 5.25	11.40 - 12.60	14.25 - 15.75		
PROTECTION CIRCUIT	OVERCURRENT PROTECTION	Works over 105% of rating and recovers automatically												
ISOLATION	INPUT-OUTPUT	AC500V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (20±15°C)												
	INPUT-CASE	AC500V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (20±15°C)												
	OUTPUT-CASE	AC500V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (20±15°C)												
ENVIRONMENT	OPERATING TEMP., HUMID. AND ALTITUDE	-20 to +71°C, 20 - 95%RH (Non condensing) (Refer to DERATING CURVE), 3,000m (10,000feet) max												
	STORAGE TEMP., HUMID. AND ALTITUDE	-40 to +85°C, 20 - 95%RH (Non condensing), 9,000m (30,000feet) max												
	VIBRATION	10 - 55Hz, 98.0m/s ² (10G), 3minutes period, 60minutes each along X, Y and Z axis												
	IMPACT	490.3m/s ² (50G), 11ms, once each X, Y and Z axis												
SAFETY	AGENCY APPROVALS	UL60950-1, C-UL, EN60950-1 Complies with IEC60950-1												
OTHERS	CASE SIZE/WEIGHT	35.5×26×10mm (W×H×D) / 25g max												
	COOLING METHOD	Convection												

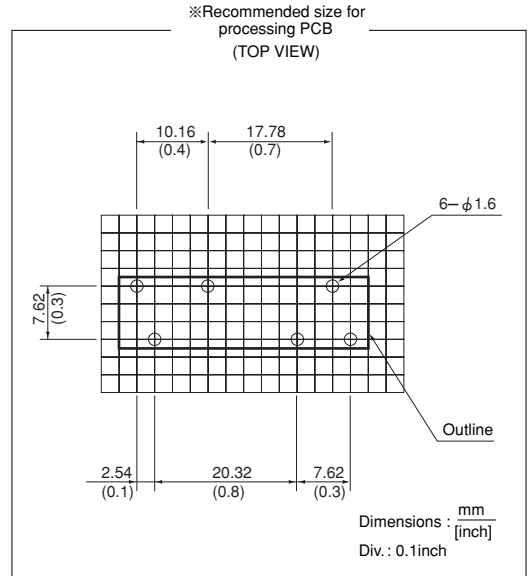
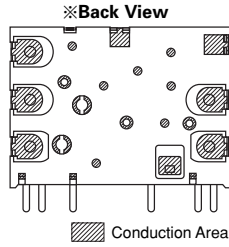
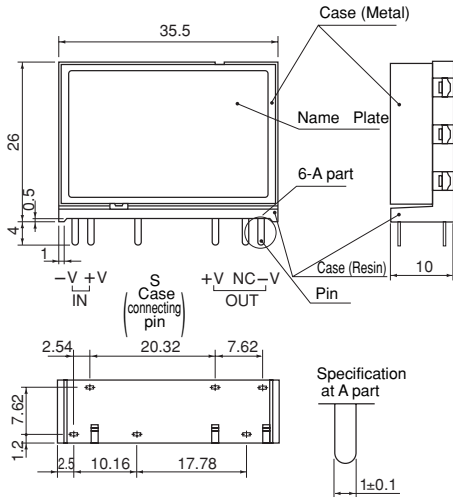
*1 Rated input. 5V, 12V, 24V or 48V DC, I_o=100%

*2 Measured by 20MHz oscilloscope.

*3 The drift is a change at 25°C of ambient temperature and 30 minutes - 8 hours after the input voltage applied at rated input/output.

* Series/Parallel operation with other model is not possible.

External view

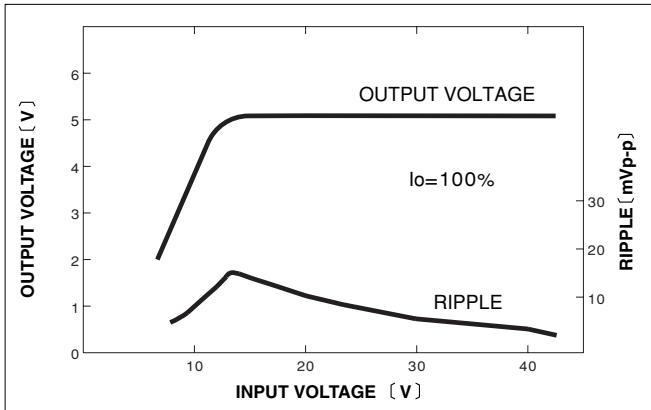


Weight: 25g or less
 Tolerance: ±0.5
 Case Material (Metal): Brass
 Case Material (Resin): PPS
 Pin Material: Phosphor Bronze (t=0.3)
 (Solder Plate)

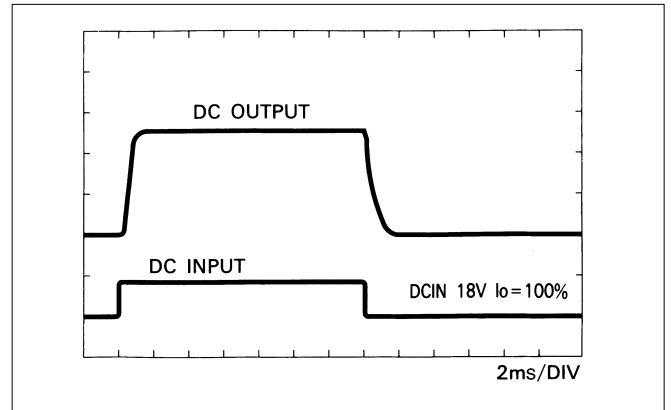
Dimensions : mm [inch]
 Div. : 0.1inch

Performance data

■ STATIC CHARACTERISTICS (ZTS32405)



■ RISE TIME & FALL TIME (ZTS32405)



ZU/ZT

■ OVERCURRENT CHARACTERISTICS (ZTS32405)

