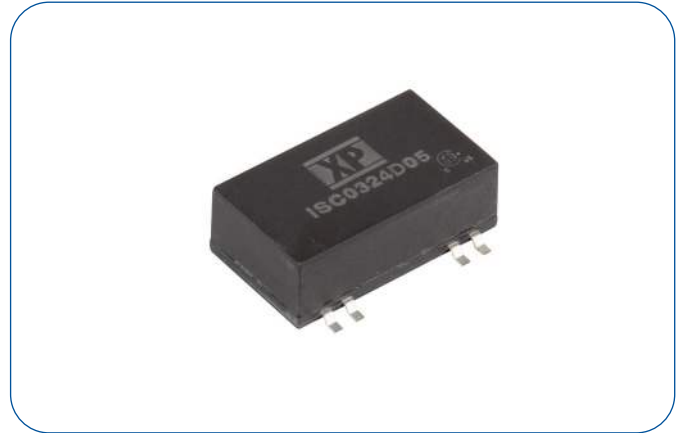


### 3 Watt

- Regulated Single & Dual Output
- Wide 4:1 Input Range
- Compact SMD Package
- 1500 VDC Isolation
- Operating Temperature -40 °C to +100 °C
- Remote On/Off
- Tape & Reel Package Available
- Optional Water Washable Versions
- 3 Year Warranty



#### Dimensions:

ISC:  
0.94 x 0.71 x 0.32" (24.00 x 18.10 x 8.25 mm)

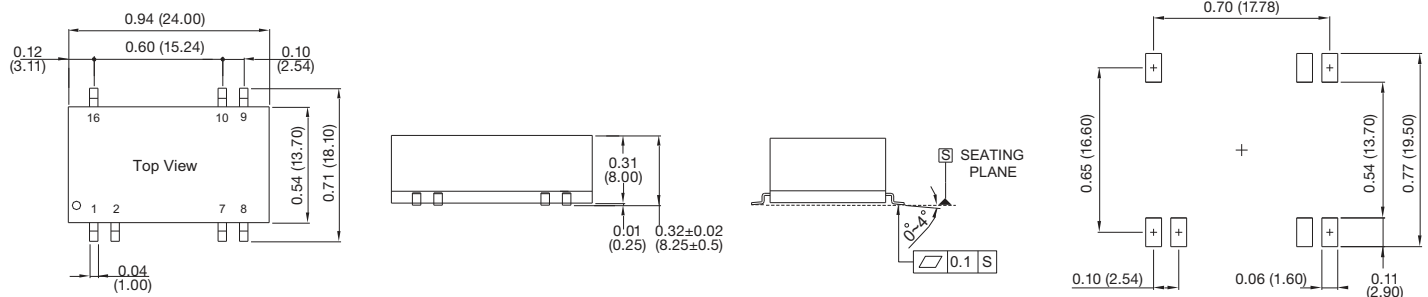
### Models & Ratings

Input Voltage	Output Voltage	Output Current		Input Current <sup>(1,2)</sup>		Maximum Capacitive Load <sup>(3)</sup>	Efficiency	Model Number <sup>(4)</sup>
		Min	Max	No Load	Full Load			
9-36 V	3.3 V	90 mA	600 mA	30 mA	110 mA	220 µF	75%	ISC0324S3V3
	5.0 V	90 mA	600 mA	30 mA	160 mA	220 µF	78%	ISC0324S05
	12.0 V	38 mA	250 mA	30 mA	156 mA	47 µF	80%	ISC0324S12
	15.0 V	30 mA	200 mA	30 mA	156 mA	47 µF	80%	ISC0324S15
	24.0 V	19 mA	125 mA	30 mA	156 mA	47 µF	80%	ISC0324S24
	±5.0 V	±45mA	±300 mA	30 mA	162 mA	±47 µF	77%	ISC0324D05
	±12.0 V	±19 mA	±125 mA	30 mA	156 mA	±47 µF	80%	ISC0324D12
18-75 V	±15.0 V	±15 mA	±100 mA	30 mA	156 mA	±47 µF	80%	ISC0324D15
	3.3 V	90 mA	600 mA	20 mA	55 mA	220 µF	75%	ISC0348S3V3
	5.0 V	90 mA	600 mA	20 mA	80 mA	220 µF	78%	ISC0348S05
	12.0 V	38 mA	250 mA	20 mA	78 mA	47 µF	80%	ISC0348S12
	15.0 V	30 mA	200 mA	20 mA	78 mA	47 µF	80%	ISC0348S15
	24.0 V	19 mA	125 mA	20 mA	78 mA	47 µF	80%	ISC0348S24
	±5.0 V	±45mA	±300 mA	20 mA	81 mA	±47 µF	77%	ISC0348D05
	±12.0 V	±19 mA	±125 mA	20 mA	78 mA	±47 µF	80%	ISC0348D12
	±15.0 V	±15 mA	±100 mA	20 mA	78 mA	±47 µF	80%	ISC0348D15

### Notes

1. Input currents measured at nominal input voltage.
2. Input current is typically 5 mA at nominal input voltage when output is remotely turned off.
3. Maximum capacitive load is per output.
4. For optional water washable version, add suffix '-P' e.g. ISC0324S12-P.
5. For tape & reel package option add suffix '-TR'. Reel size 250 pcs.

### Mechanical Details



### Input

Characteristic	Minimum	Typical	Maximum	Units	Notes & Conditions
Input Voltage Range	9		36	VDC	24 V nominal
	18		75	VDC	48 V nominal
Input Filter	Pi type				
Input Reflected Ripple		20		mA pk-pk	Through 12 $\mu$ H inductor and 47 $\mu$ F capacitor
Input Surge			50	VDC for 1 s	24 V models
			100	VDC for 1 s	48 V models
Undervoltage Lockout	ON at >4.5 V, OFF at <8 V				24 V models
	ON at >8.5 V, OFF at <16 V				48 V models
Remote On/Off	ON: Logic high (2.5 - 5.5 V) or open circuit OFF: Logic low (<0.8 V) or short pin 1 to pin 2				

### Output

Characteristic	Minimum	Typical	Maximum	Units	Notes & Conditions
Output Voltage	3.3		30	VDC	See Models and Ratings table
Initial Set Accuracy			$\pm 2$	%	
Output Voltage Balance		$\pm 1.0$	$\pm 2.0$	%	For dual output with balanced loads
Minimum Load	15			%	See Models and Ratings table
Line Regulation		$\pm 0.5$	$\pm 1.0$	%	
Load Regulation		$\pm 0.5$	$\pm 1.2$	%	15% to 100%
Cross Regulation			$\pm 5$	%	On dual output models when one load is varied between 25% and 100% and other is fixed at 100%
Transient Response		$\pm 3$		% deviation	Recovery within 1% in less than 600 $\mu$ s for a 25% load change.
Ripple & Noise			100	mV pk-pk	20 MHz bandwidth. Measured using 0.47 $\mu$ F ceramic capacitor.
Overload Protection	110	150		%	Foldback
Short Circuit Protection					Continuous, with auto recovery
Maximum Capacitive Load					See Models and Ratings table
Temperature Coefficient			0.02	%/ $^{\circ}$ C	

### General

Characteristic	Minimum	Typical	Maximum	Units	Notes & Conditions
Efficiency		80		%	See Models and Ratings table
Isolation: Input to Output	1500/1800			VDC	60 s/1 s
Isolation Resistance	$10^9$			$\Omega$	At 500 VDC
Isolation Capacitance		350	500	pF	
Switching Frequency		350		kHz	
Power Density			7.5	W/in <sup>3</sup>	
Mean Time Between Failure		300		kHrs	MIL-HDBK-217F, +25 $^{\circ}$ C GB
Weight		0.01 (4.2)		lb (g)	
Moisture Sensitivity Level	Level 2				IPC/JEDEC J-STD-020D.1

### Environmental

Characteristic	Minimum	Typical	Maximum	Units	Notes & Conditions
Operating Temperature	-40		+100	$^{\circ}$ C	See Derating Curve.
Storage Temperature	-50		+125	$^{\circ}$ C	
Case Temperature			+105	$^{\circ}$ C	
Humidity			95	%RH	Non-condensing
Cooling					Natural convection
Case Flammability	UL 94V-0 Rated				Non conductive black plastic
Lead-Free Reflow Solder Process					IPC/JEDEC J-STD-020D.1

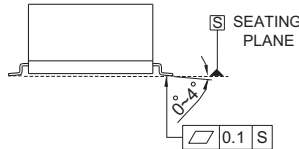
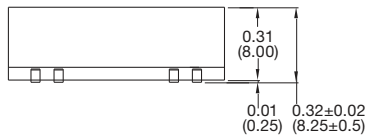
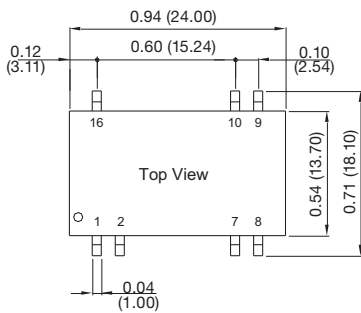
### Safety Approvals

Safety Agency	Safety Standard	Notes & Conditions
UL	UL/cUL60950-1, UL/cUL62368-1	Information Technology
CE	Meets all applicable directives	
UKCA	Meets all applicable legislation	

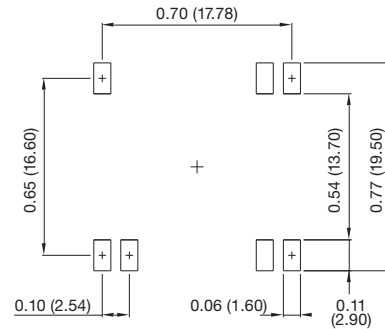
### EMC: Emissions

Phenomenon	Standard	Test Level	Notes & Conditions
Conducted	EN55032	Class A	

### Mechanical Details



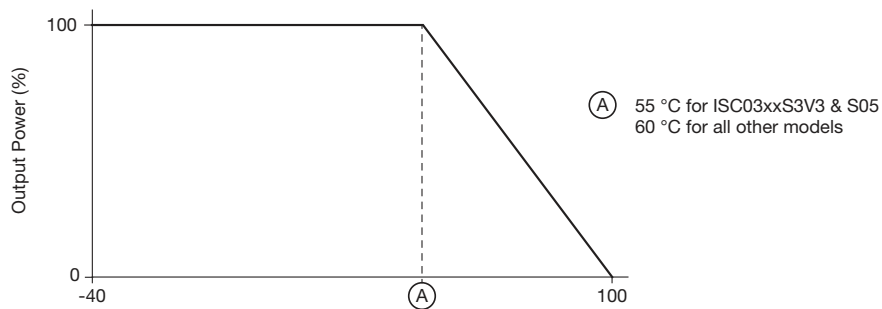
### Connecting Pin Pattern



Pin Connections		
Pin	Single	Dual
1	-Vin	-Vin
2	Remote On/Off	Remote On/Off
7	No Connection	No Connection
8	No Connection	Common
9	+Vout	+Vout
10	-Vout	-Vout
16	+Vin	+Vin

### Application Notes

#### Derating Curve



#### Notes

- All dimensions are in inches (mm)
- Weight: 0.01 lbs (4.2 g) approx.

- Tolerance: X.XX±0.01 (X.X±0.25)  
X.XXX±0.005 (X.XX±0.13)
- Pin Tolerance: ±0.002 (±0.05)