Specifications

All specifications are typical at nominal input, full load at 25°C unless otherwise stated.

OUTPUT SPECIFICATIONS

Voltage adjustability (See Note 1)	Fixed output versions Wide trim version	±10% 0.8-3.63 Vdc
Setpoint accuracy		±0.4%
Line regulation		±0.2%
Load regulation		±1.0%
Minimum load		0 A
Overshoot/undershoot		None
Ripple and noise (0 to 20 MHz BW)		60 mV pk-pk 25 mV rms max.
Temperature co-efficient		±0.01%/°C
Transient response		60 mV max. deviation 50 µs recovery to within ±1.0%
Remote sense		10% Vo compensation

INPUT SPECIFICATIONS

Input voltage range		3.0-5.5 Vdc
Input current	No load	70 mA typ.
Input current (max.)		11.8 A max. @ Io max. and Vout = 3.63 V
Input current ripple		110 mA rms
Remote ON/OFF		(See Note 2)
Start-up time		20 ms

EMC CHARACTERISTICS

Electrostatic discharge	EN61000-4-2, IEC801-2
Conducted immunity	EN61000-4-6
Radiated immunity	EN61000-4-3

GENERAL SPECIFICATIONS

Efficiency		See table
Insulation voltage		Non-isolated
Switching frequency	Fixed	300 kHz typ.
Approvals and standards		EN60950 UL/cUL60950
Material flammability		UL94V-0
Dimensions	(LxWxH)	33.02 x 13.46 x 8.21 mm 1.3 x 0.53 x 0.323 inches
Weight		6.3 g (0.22 oz)
Coplanarity		100 µm
MTBF	Telcordia SR-332 MIL-HDBK-217F	7,042,000 hours 680,000 hours

ENVIRONMENTAL SPECIFICATIONS

Thermal performance (See Note 3)	Operating ambient, temperature	-40 °C to +100 °C
	Non-operating	-40 °C to +125 °C

PROTECTION

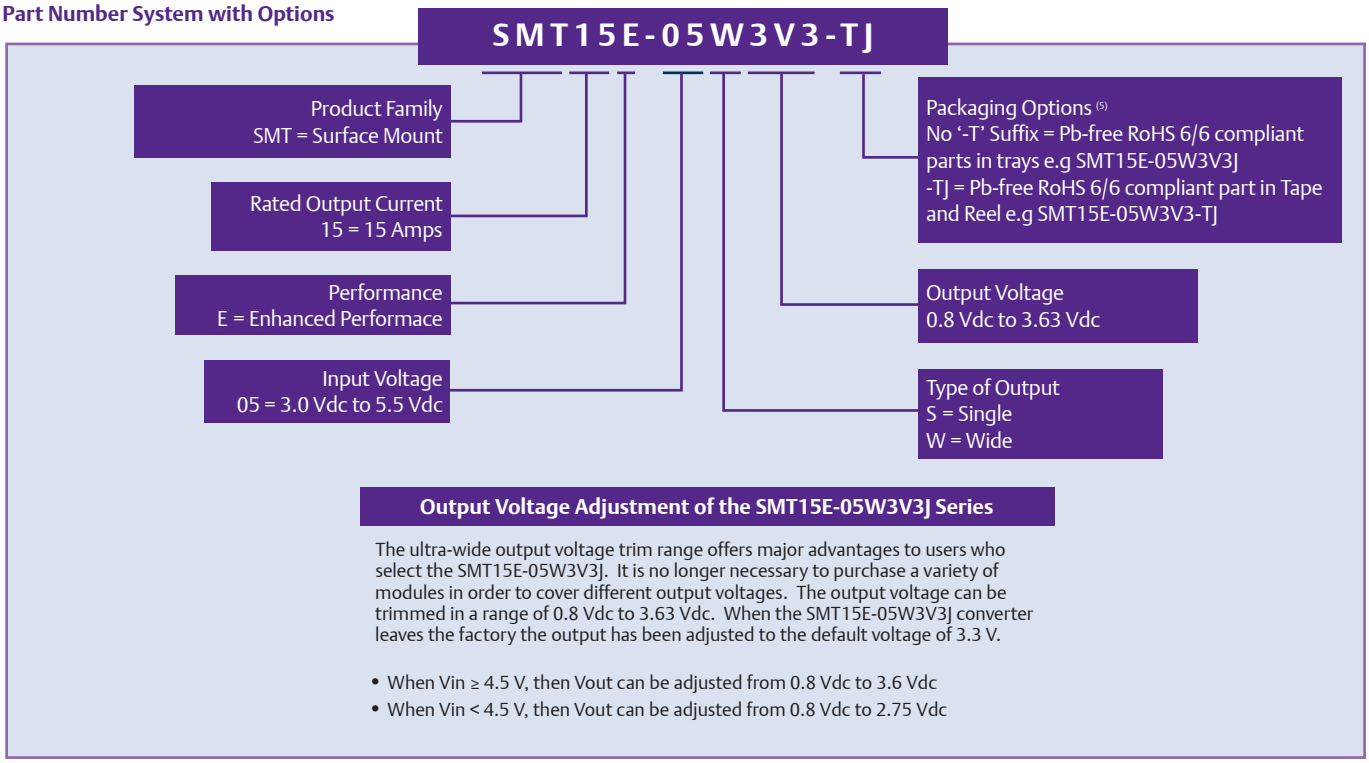
Short-circuit	Continuous
Thermal	Automatic recovery

Specifications

All specifications are typical at nominal input, full load at 25°C unless otherwise stated.

OUTPUT POWER (MAX.)	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT (MIN.)	OUTPUT CURRENT (MAX.)	EFFICIENCY (TYP.)	REGULATION		MODEL NUMBER [5,6]
						LINE	LOAD	
41.25 W	3.0-5.5 Vdc	2.5 Vdc	0 A	15 A	93.5%	±0.2%	±1.0%	SMT15E-05S2V5J (EOL)
54.45 W	4.5-5.5 Vdc	3.3 Vdc	0 A	15 A	95%	±0.2%	±1.0%	SMT15E-05S3V3J (EOL)
54.45 W	3.0-5.5 Vdc	0.8-3.63 Vdc	0 A	15 A	95% [4]	±0.2%	±1.0%	SMT15E-05W3V3J

Part Number System with Options



Output Voltage Adjustment of the SMT15E-05W3V3J Series

The ultra-wide output voltage trim range offers major advantages to users who select the SMT15E-05W3V3J. It is no longer necessary to purchase a variety of modules in order to cover different output voltages. The output voltage can be trimmed in a range of 0.8 Vdc to 3.63 Vdc. When the SMT15E-05W3V3J converter leaves the factory the output has been adjusted to the default voltage of 3.3 V.

- When Vin ≥ 4.5 V, then Vout can be adjusted from 0.8 Vdc to 3.6 Vdc
- When Vin < 4.5 V, then Vout can be adjusted from 0.8 Vdc to 2.75 Vdc

Notes

1 When Vin ≥ 4.5 V, then Vout can be adjusted from 0.8 Vdc to 3.6 Vdc. When Vin < 4.5 V, then Vout can be adjusted from 0.8 Vdc to 2.75 Vdc.

2 The SMT15E features a 'Negative Logic' Remote ON/OFF operation. If not using the Remote ON/OFF pin, leave the pin open (the converter will be on). The Remote ON/OFF pin is referenced to ground.

The following conditions apply for the SMT15E:

Configuration	Converter Operation
Remote pin open circuit	Unit is ON
Remote pin pulled low	Unit is ON
Remote pin pulled high [Von/off >1.2 V]	Unit is OFF

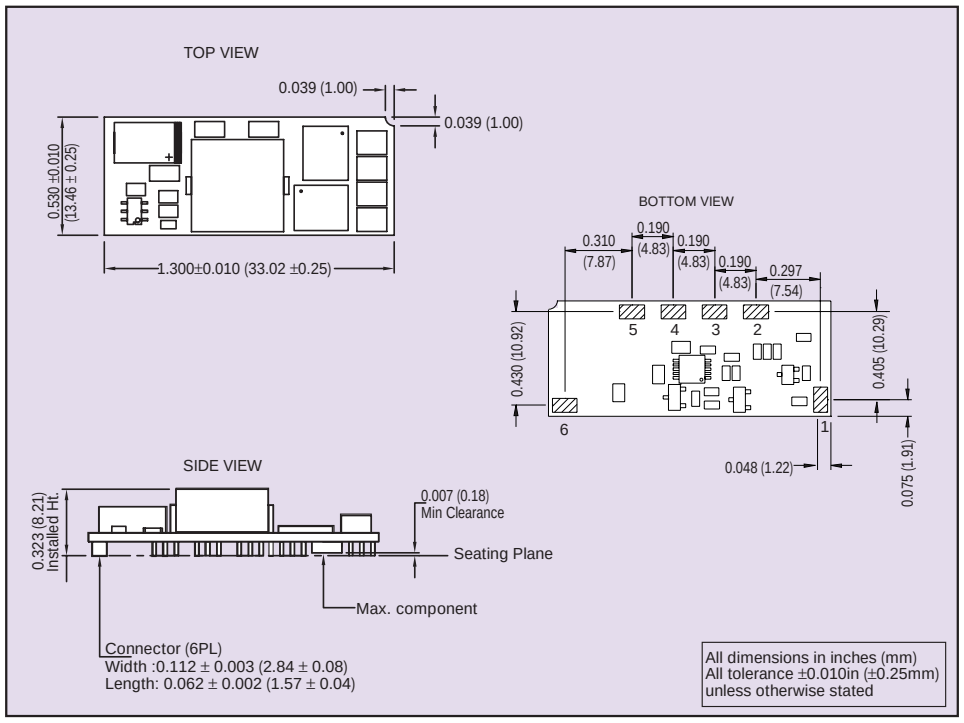
A 'Positive Logic' Remote ON/OFF version is also possible with this converter. To order please place the suffix '-R' at the end of the model number, e.g. SMT15E-05S3V3-RJ.

3 Full derating curves available in both the Longform Datasheet and Application Note 136.

4 When the unit is trimmed down to 0.8 V, the efficiency is 82.5%

5 TSE RoHS 5/6 (non Pb-free) compliant versions may be available on special request, please contact your local sales representative for details.

6 NOTICE: Some models do not support all options. Please contact your local Artesyn representative or use the on-line model number search tool at http://www.artesyn.com/powergroup/products.htm to find a suitable alternative.



PIN CONNECTIONS	
PIN NUMBER	**FUNCTION**
1	Remote ON/OFF
2	Remote Sense +
3	Trim
4	+Vout
5	Ground
6	+Vin

Americas
5810 Van Allen Way
Carlsbad, CA 92008
USA
Telephone: +1 760 930 4600
Facsimile: +1 760 930 0698

Europe (UK)
Waterfront Business Park
Merry Hill, Dudley
West Midlands, DY5 1LX
United Kingdom
Telephone: +44 (0) 1384 842 211
Facsimile: +44 (0) 1384 843 355

Asia (HK)
16th - 17th Floors, Lu Plaza
2 Wing Yip Street, Kwun Tong
Kowloon, Hong Kong
Telephone: +852 2176 3333
Facsimile: +852 2176 3888

For global contact, visit:
www.powerconversion.com
technicalsupport@powerconversion.com

Emerson Network Power.
The global leader in enabling business-critical continuity.

- AC Power
- Connectivity
- DC Power
- **Embedded Power**
- Inbound Power
- Integrated Cabinet Solutions
- Outside Plant
- Precision Cooling
- Site Monitoring and Services

EmersonNetworkPower. com