4 to 18 W
Formats DIL 24 and 2" x 1" x 0.4"

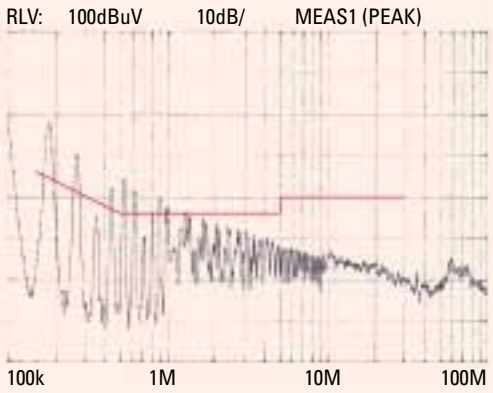
- Ultra wide input range
- Non-isolated

Models

Models	Input Specifications			Output Specifications				
	Minimum	Maximum	Nominal	+ Output		- Output		Power
	(VDC)	(VDC)	(VDC)	Vout (VDC)	Iout (mA)	Vout (VDC)	Iout (mA)	(W)
3RXE 1203SX	4	16	12	3.3	1500			5
3RXE 2405SX	8	36	24	5	800			4
7RXE 0503S	4	8	5	3.3	3000			10
7RXE 1203S	4	16	12	3.3	2500			8.25
7RXE 2405S	8	36	24	5	1500			7.5
7RXE 2412S	16	36	24	12	1500			18
7RXE 2415S	19	36	24	15	1200			18

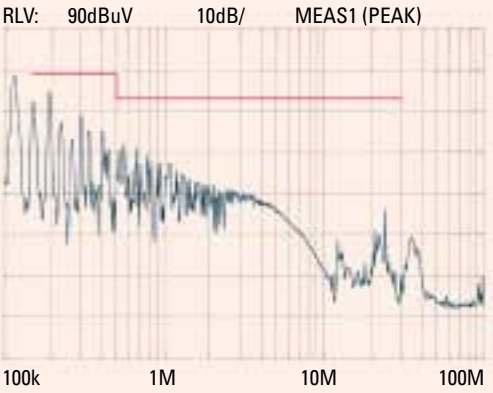
EMC curves

3RXE 1203SX



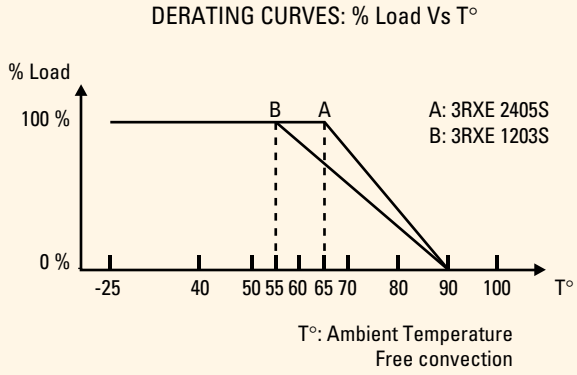
Conducted perturbation

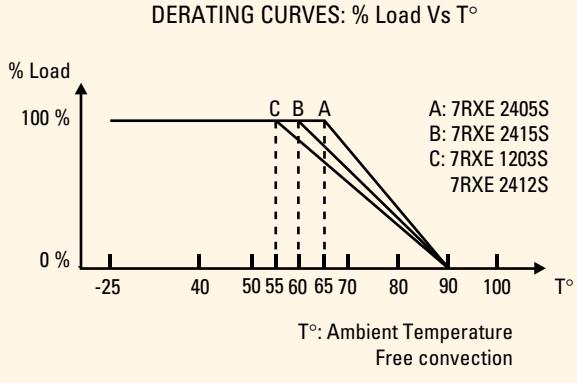
7RXE 2415S



Conducted perturbation

Derating curves





Electrical specifications

Parameters	Conditions	3RXE		7RXE				
Nominal input voltage	Tc = - 25 to + 90°C	12 V	24 V	5 V	12 V	24 V		
Input voltage range	Iout = 0 to 100 %	4 to 16 V	8 to 36 V	4 to 8 V	4 to 16 V	8 to 36 V	16 to 36 V	19 to 36 V
Input over voltage	Time period = 0.1 s	See note 1	40 V	See note 1		60 V		
No load input current	Vin nom.	3 mA	15 mA	3 mA		10 mA		
Input current max.	Vin min.; Iout max.	1.65 A	0.8 A	3.3 A	2.75 A	1.2 A	1.3 A	1.1 A
Input filter	See note 2	Capacitor	PI filter	The 7RXE regulators should not operate without external capacitor				
Output voltage accuracy	Vin nom.; Iout nom.	± 2 %	± 3 %	± 2 %	± 2 %	± 0.5 %		
Load regulation	10 to 100 % of Iout	2 %		1 %	± 2 %	0.5 %		
Line regulation	Vin min. to Vin max.	1 %	2 %	0.5 %	1 %	0.25 %		
Limitation range	Vout - 4 %	120 % of Iout						
Output ripple peak to peak	BW = 20 MHz	100 mV See note 3		100 mV				
Output over voltage protection		YES, zener diode across output pins						
Output voltage trimmer		NO				± 10 %		
Short-circuit protection		YES						
Efficiency	Vin nom.; Iout nom.	75 %	76 %	86 %	75 %	78 %	87 %	88 %
Switching Frequency		100 to 200 kHz	40 kHz	100 to 200 kHz		40 kHz		
Thermal impedance	Base plate to air	6.5°C/W						
Operating temperature range	Ta:	- 25 to + 75°C						
Storage temperature	Ts:	- 40 to + 105°C						
Maximum case temperature	Tc:	+ 90°C						
Temperature coefficient	Tc = - 25 to + 90°C	< 0.02 %/°C						
Case material	UL94V-0	Plastic box						
MTBF (MIL-HDBK-217-F)	Ground bening Ta = + 25°C	> 500 000 h						
Weight		12 g		25 g				

These models have no Input/Output isolation.
It is recommended to protect the input by fuses or other protection devices. Fuses are never supplied internally, and without them, severe damage or even fire can occur in the event of a module failure. A slow fuse with a rating of 2x the Iin max. is recommended.
All specifications are typical, 25°C ambient, with nominal input voltage and under full output load conditions, unless otherwise stated.
Note 1: The input voltage for the regulators 3RXE 1203 SX and 7RXE 1203 S should not exceed 16 Vmax.
Note 2: The regulators of the 7RXE series should not be used whithout an external input capacitor ; 220 µF/63 V low E.S.R. is recommended.
Note 3: With 220 µF external capacitor.

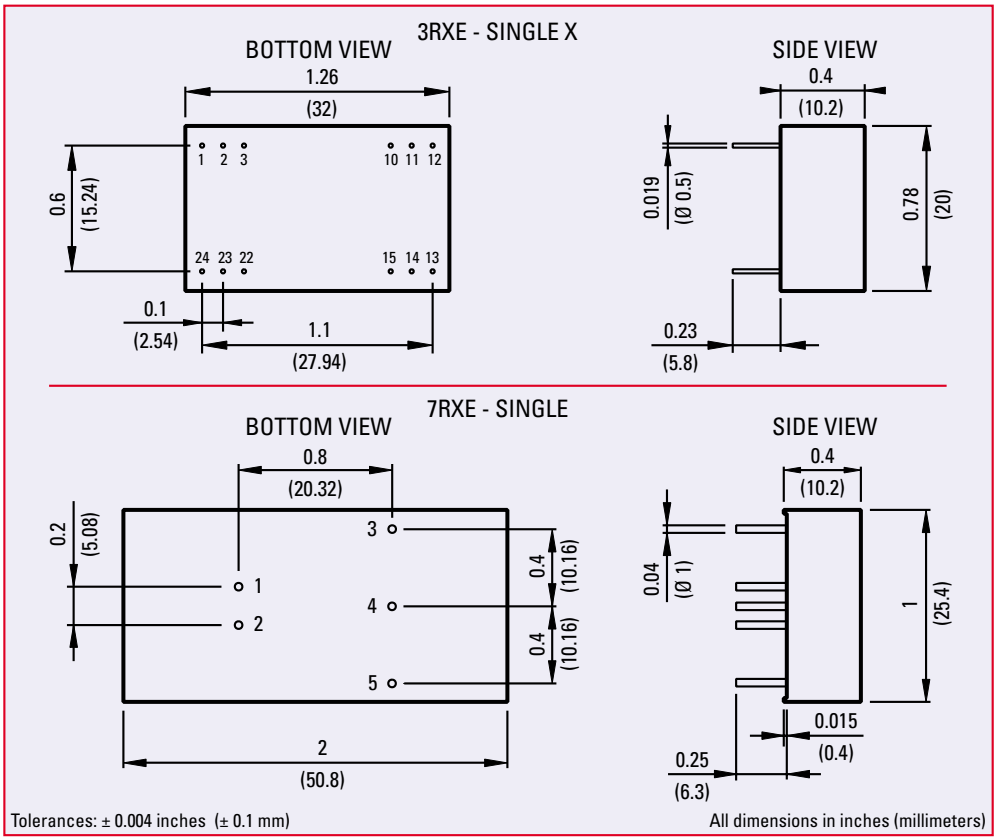
Pin connections 3RXE

Pin	Single output
1	+ Input
2	N/C
3	N/C
10	Common
11	+ Output
12	Commun
13	Commun
14	+ Output
15	Commun
22	N/C
23	N/C
24	+ Input

Pin connections 7RXE

Pin	Single output
1	+ Input
2	- Input
3	+ Output
4*	Prog.
5	- Output

Pin 4 (Programming) is available on request.



Tolerances: ± 0.004 inches (± 0.1 mm)

All dimensions in inches (millimeters)