

# EPM78Vx

## Non-isolated DC-DC converter



### Product features

- Switching regulator, Non-isolated DC-DC converter
- Convenient 3-Pin SIP Package compatible with LM78xx linear regulator
- Input voltages: 4.75 V to 32 Vdc
- 6 SKU's representing 6 output voltages (1.8 V – 15 V) @ 1A output current
- Efficiency up to 96%
- Operating ambient temperature -40 °C to +90 °C
- Continuous short circuit protection
- EN62368 safety approval

### Engineering tools

- EPM78 Evaluation kit
- PN: EPM78-EVK  
Includes evaluation board and 7 EPM78 part numbers
- [EPM78 Evaluation kit user guide](#)

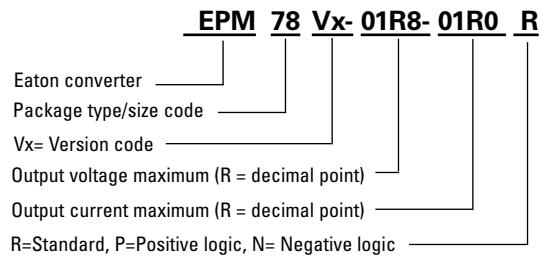
### Applications

- Industrial
  - Automation & testing equipment
  - Displays
  - Lighting
  - IoT
  - Power Supply
- Energy
  - Solar and wind inverters
  - Battery management
- Medical
  - Hospital & home care equipment
  - Inventory tracking
  - Diagnostics
- Telecom
  - Networking and telecommunications
  - Infrastructure

### Environmental compliance



### Ordering part number



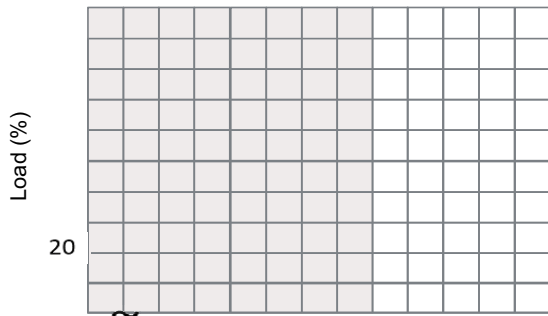
**Specifications**



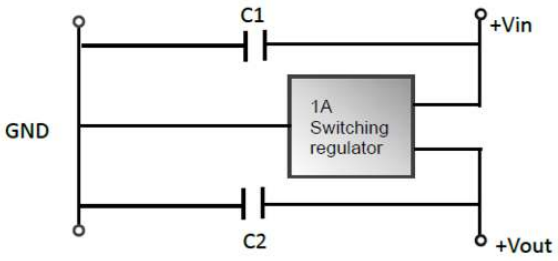


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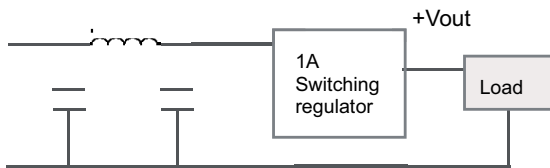
**Derating curve**



**Standard application circuit**

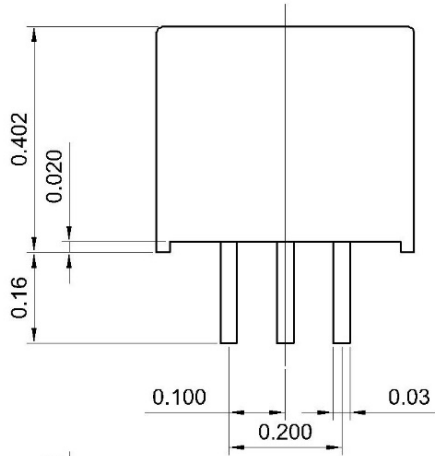


**EMC filtering circuit**



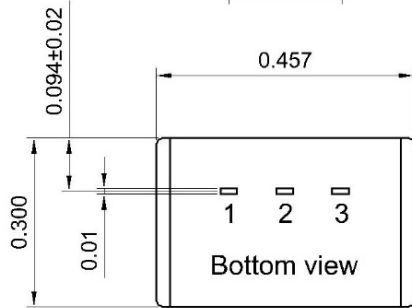
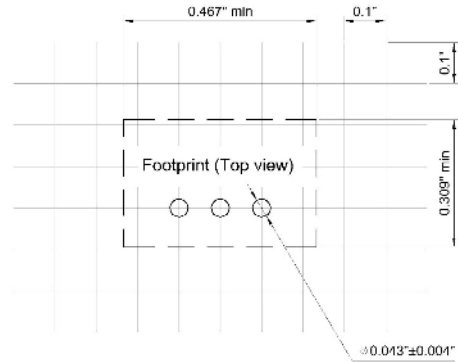
Class	C1	L1	C2
Class A	1206 4.7 $\mu$ F 50 V MLCC	3.3 $\mu$ H	x
Class B	1210 10 $\mu$ F 50 V MLCC	10 $\mu$ H	1206 4.7 $\mu$ F 50 V MLCC

**Mechanical dimension and pinning - inches**



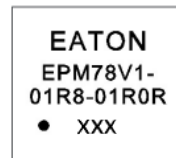
Pin	Function
1	+Vin
2	GND
3	+Vout

**Recommended pad layout**



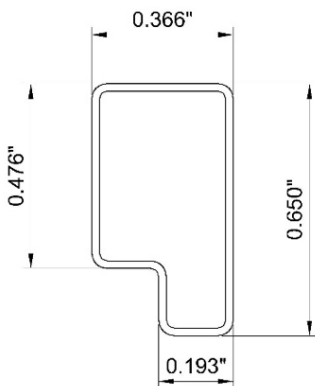
Projection: Third angle projection  
Tolerance: X.XX ± 0.02 X.XXX ± 0.01  
PIN tolerance: ± 0.004

**Marking**

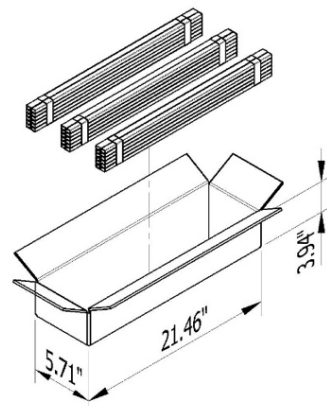


xxx= lot code

**Packaging- Inches**



Tolerance : ±0.02"  
1 Tube = 42 pcs  
Length : 20.47"±0.08"



Carton=21.46\*5.71\*3.94 inch  
MOQ=42(pcs/tube)\*12(tube/bundle)\*3(bundle)=1512pcs=4Kg

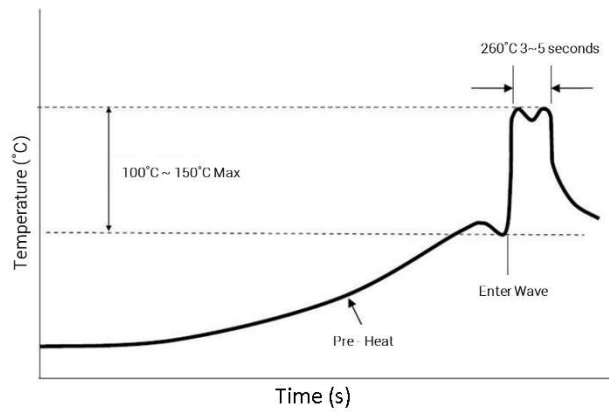
## General information

### Storage and handling

The shelf life will be a minimum of 12 months, when stored at the following conditions: < 40 °C, < 90% relative humidity.

### Wave solder profile

The wave solder profile is measured based on lead temperature. The internal temperature of the solder parts should not exceed +210 °C. The duration of solder dwell time should be between 3 to 5 seconds, and not to exceed 10 seconds.



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