

# MYMGK1R812ERSR

8V to 15V input voltage, 12A, Buck Converter with 85degC Ta

In Production

Recommended

RoHS

## Applications

Unsuitable Applications	Please be sure to read and comply with these "Precautions for use."
Specific Applications	Consumer equipment,Industrial Equipment Please refer to Our Website and specifications, etc. for information about the performance, functions, quality, management, and safety required for the above applications, and use Products after confirming the performance and reliability of the actual Product.
Recommended Applications	Processor [ASIC / FPGA / xPU],Optical Backbone network,Optical Module, Server,Storage,Switch,Base Station, Industrial Equipment

## Features

- Input voltage ranges from 8 to 15V
- Settable output voltage from 0.7 to 1.8V
- Up to 12 A of output current
- Quick transient response to load change
- Small package, 9 x 10.5 x 5.6mm
- Over current protection
- Thermal protection
- Enable control
- Power Good signal
- High Reliability / Heat Shock Testing, 700cycle (-40 to +125degC)
- Meets CISPR 22 class B conducted emission

## Appearance & Shape

MYMGK1R812 Series / MYMGK1R812-H series

MYMGK1R812FRSR/MYMGK1R812FRSR-H  
Cn: 47µF/10V x 2pcs (4.5V/Vin±5.0V)  
or 22µF/25V x 2pcs (5.5V/Vin±8.0V)  
Cout: 220µF/4V x 3pcs

MYMGK1R812ERSR/MYMGK1R812ERSR-H  
Cn: 22µF/25V x 3pcs  
Cout: 220µF/4V x 3pcs

(Typical topology is shown. Murata recommends an external input fuse.)

**Attention**  
1.This datasheet is downloaded from the website of Murata Manufacturing Co., Ltd. Therefore, it's specifications are subject to change or our products in it may be discontinued without advance notice. Please check with our sales representatives or product engineers before ordering.  
2.This datasheet has only typical specifications because there is no space for detailed specifications.  
Therefore, please review our product specifications or consult the approval sheet for product specifications before ordering.

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## Specifications

Iout(A)Max	12A
Vin(V)	8V to 15V
Vin(V)typ	12V
Vout(V)	0.7V to 1.8V
Vout(V)typ	1V
LineRegulation (%)	-3% to 3%
LoadRegulation (%)	-1% to 1%
Outputs (#)	1
Efficiency (%)	90.4%
Switching frequency (kHz)	500kHz
Size(mm)W	9.0mm
Size(mm)L	10.5mm
Size(mm)T	5.6mm
Operatingtemperature(degC)	-40°C to 85°C
Circuit topology	Buck(Step-down)
Package	SMD
Type	Modules (integrated components)
Productseries	MYMGK
Product Series Features	MYMGK series which is POL (Point of Load)&nbsp; is single output MonoBK.
Brand	Murata

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