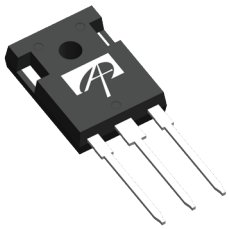
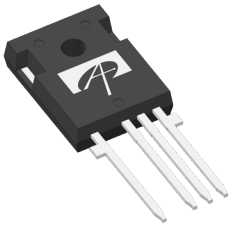
ALPHA & OMEGA
SEMICONDUCTOR

650V / 750V / 1200V αSiC MOSFETs

- Ultra-low Loss Switching for High-Efficiency Applications
- AEC-Q101 Automotive Qualified
- Rugged Design with 100% UIS Testing
- Designed for 15V Gate Drive



TO-247-3L



TO-247-4L

650V/750V/
1200V αSiC
MOSFETs

650V / 750V / 1200V αSiC MOSFETs

Features

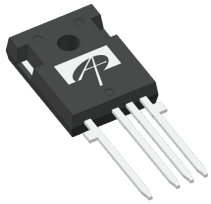
- Proprietary αSiC MOSFET Technology
- Low loss, fast switching speeds with low R_G
- Optimized drive voltage (V_{GS} =15V)
- Robust body diode and low Qrr

Applications

- Automotive
- xEV charger
- Solar inverters
- Industrial
- UPS
- SMPS
- Motor drives

1200V αSiC MOSFETs

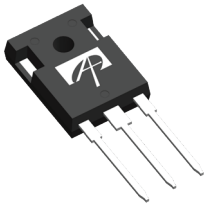
TO-247-4L



Part Number	V_{DS} (Max)	$R_{DS(ON)}$ (Typ)	$V_{GS, OP}$	I_{DS}	T_J (Max)	Application
AOM020V120X2Q *	1200V	20 mΩ	-5V/+15V	89A	175°C	Auto / Industrial
AOM033V120X2Q	1200V	33 mΩ	-5V/+15V	68A	175°C	Auto / Industrial
AOM045V120X2Q *	1200V	45mΩ	-5V/+15V	50A	175°C	Auto / Industrial
AOM065V120X2Q	1200V	65mΩ	-5V/+15V	40A	175°C	Auto / Industrial
AOK033V120X2Q	1200V	33 mΩ	-5V/+15V	68A	175°C	Auto / Industrial
AOK065V120X2	1200V	65mΩ	-5V/+15V	40A	175°C	Industrial
AOK150V120X2Q	1200V	150mΩ	-5V/+15V	21A	175°C	Auto / Industrial
AOK500V120X2	1200V	500mΩ	-5V/+15V	6A	175°C	Industrial

650V / 750V αSiC MOSFETs

TO-247-3L



Part Number	V_{DS} (Max)	$R_{DS(ON)}$ (Typ)	$V_{GS, OP}$	T_J (Max)	Application
AOM015V65X2	650V	15 mΩ	-5V/+15V	175°C	Industrial
AOM060V65X2	650V	60mΩ	-5V/+15V	175°C	Industrial
AOM015V75X2Q	750V	15 mΩ	-5V/+15V	175°C	Automotive
AOM060V75X2Q	750V	60mΩ	-5V/+15V	175°C	Automotive
AOK015V75X2Q	750V	15 mΩ	-5V/+15V	175°C	Automotive
AOK060V75X2Q	750V	60mΩ	-5V/+15V	175°C	Automotive

** = Available Q3'23*

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