

AOD4102

AOD4102 Information



Part Number	AOD4102	
Manufacturer	Alpha & Omega Semiconductor Inc.	
Category	Discrete Semiconductor Products Transistors - FETs, MOSFETs - Single	
Description	MOSFET N-CH 30V 19A TO-252	
Package	TO-252-3, DPak (2 Leads + Tab), SC-63	
	For the pricing/inventory/lead time, please contact us Website: https://www.heisener.com	
	E-mail: salesdept@heisener.com	



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AOD4102 Specifications

Manufacturer Part NumberAOD4102ManufacturerAlpha & Omega Semiconductor Inc.CategoryDiscrete Semiconductor ProductsTransistors - FETs, MOSFETs - SinglePackageTO-252-3, DPak (2 Leads + Tab), SC-63Series-FET TypeN-ChannelTechnologyMOSFET (Metal Oxide)Drain to Source Voltage (Vdss)30VCurrent - Continuous Drain (Id) @ 25°C8A (Ta), 19A (Tc)Drive Voltage (Max Rds On, Min Rds On)4.5V, 10VVgs(th) (Max) @ Id3V @ 250µAGate Charge (Qg) (Max) @ Vgs6.6nC @ 10VInput Capacitance (Ciss) (Max) @ Vds360pF @ 15VVgs (Max)+20VFET Feature-Power Dissipation (Max)37 mOhm @ 12A, 10VOperating Temperature-55°C ~ 175°C (TJ)Mounting TypeSurface MountSurpler Device PackageTO-252, (D-Pak)Package / CaseTo-252, (D-Pak)		
CategoryDiscrete Semiconductor Products Transistors - FETs, MOSFETs - SinglePackageTO-252-3, DPak (2 Leads + Tab), SC-63Series-FET TypeN-ChannelTechnologyMOSFET (Metal Oxide)Drain to Source Voltage (Vdss)30VCurrent - Continuous Drain (Id) @ 25°C&A (Ta), 19A (Tc)Drive Voltage (Max Rds On, Min Rds On)4.5V, 10VVgs(th) (Max) @ Id3V @ 250µAGate Charge (Qg) (Max) @ Vds6.6nC @ 10VInput Capacitance (Ciss) (Max) @ Vds360pF @ 15VVgs (Max)+20VFET Feature-Power Dissipation (Max)37 mOhm @ 12A, 10VQs (n (Max) @ Id, Vgs37 mOhm @ 12A, 10VOperating Temperature-55°C ~ 175°C (TJ)Mounting TypeSurface MountSupplier Device PackageTO-252, (D-Pak)Package / CaseTO-252, 3DPak (2 Leads + Tab), SC-63	Manufacturer Part Number	AOD4102
Transistors - FETs, MOSFETs - SinglePackageTO-252-3, DPak (2 Leads + Tab), SC-63Series-FET TypeN-ChannelTechnologyMOSFET (Metal Oxide)Drain to Source Voltage (Vdss)30VCurrent - Continuous Drain (Id) @ 25°C&A (Ta), 19A (Tc)Drive Voltage (Max Rds On, Min Rds On)4.5V, 10VVgs(th) (Max) @ Id3V @ 250µAGate Charge (Qg) (Max) @ Vgs6.6nC @ 10VInput Capacitance (Ciss) (Max) @ Vds360pF @ 15VVgs (Max)±20VFET Feature-Power Dissipation (Max)4.2W (Ta), 21W (Tc)Rds On (Max) @ Id, Vgs37 mOhm @ 12A, 10VOperating Temperature-55°C ~ 175°C (TJ)Mounting TypeSurface MountSupplier Device PackageTO-252, (D-Pak)Package / CaseTO-252-3, DPak (2 Leads + Tab), SC-63	Manufacturer	Alpha & Omega Semiconductor Inc.
PackageTO-252-3, DPak (2 Leads + Tab), SC-63Series-FET TypeN-ChannelTechnologyMOSFET (Metal Oxide)Drain to Source Voltage (Vdss)30VCurrent - Continuous Drain (Id) @ 25°C8A (Ta), 19A (Tc)Drive Voltage (Max Rds On, Min Rds On)4.5V, 10VVgs(th) (Max) @ Id3V @ 250µAGate Charge (Qg) (Max) @ Vgs6.6nC @ 10VInput Capacitance (Ciss) (Max) @ Vds360pF @ 15VVgs (Max)±20VFET Feature-Power Dissipation (Max)4.2W (Ta), 21W (Tc)Rds On (Max) @ Id, Vgs37 mOhm @ 12A, 10VOperating Temperature-55°C ~ 175°C (TJ)Mounting TypeSurface MountSupplier Device PackageTO-252, (D-Pak)Package / CaseTO-252-3, DPak (2 Leads + Tab), SC-63	Category	Discrete Semiconductor Products
Series-FET TypeN-ChannelTechnologyMOSFET (Metal Oxide)Drain to Source Voltage (Vdss)30VCurrent - Continuous Drain (Id) @ 25°C8A (Ta), 19A (Tc)Drive Voltage (Max Rds On, Min Rds On)4.5V, 10VVgs(th) (Max) @ Id3V @ 250µAGate Charge (Qg) (Max) @ Vgs6.6nC @ 10VInput Capacitance (Ciss) (Max) @ Vds360pF @ 15VVgs (Max)±20VFET Feature-Power Dissipation (Max)4.2W (Ta), 21W (Tc)Rds On (Max) @ Id, Vgs37 mOhm @ 12A, 10VOperating Temperature-55°C ~ 175°C (TJ)Mounting TypeSurface MountSupplier Device PackageTO-252, (D-Pak)Package / CaseTo-252-3, DPak (2 Leads + Tab), SC-63		Transistors - FETs, MOSFETs - Single
FET TypeN-ChannelTechnologyMOSFET (Metal Oxide)Drain to Source Voltage (Vdss)30VCurrent - Continuous Drain (Id) @ 25°C8A (Ta), 19A (Tc)Drive Voltage (Max Rds On, Min Rds On)4.5V, 10VVgs(th) (Max) @ Id3V@ 250µAGate Charge (Qg) (Max) @ Vds6.6nC @ 10VIput Capacitance (Ciss) (Max) @ Vds360pF @ 15VVgs (Max)±20VFET Feature-Power Dissipation (Max)4.2W (Ta), 21W (Tc)Rds On (Max) @ Id, Vgs37 mOhm @ 12A, 10VQperating Temperature55°C ~ 175°C (TJ)Mounting TypeSufface MountSupplier Device PackageTo-252, (D-Pak)Package / CaseTo-252, SDPA (2 Leads + Tab), SC-63	Package	TO-252-3, DPak (2 Leads + Tab), SC-63
TechnologyMOSFET (Metal Oxide)Drain to Source Voltage (Vdss)30VCurrent - Continuous Drain (Id) @ 25°C8A (Ta), 19A (Tc)Drive Voltage (Max Rds On, Min Rds On)4.5V, 10VVgs(th) (Max) @ Id3V @ 250µAGate Charge (Qg) (Max) @ Vgs6.6nC @ 10VInput Capacitance (Ciss) (Max) @ Vds360pF @ 15VVgs (Max)±20VFET Feature-Power Dissipation (Max)4.2W (Ta), 21W (Tc)Rds On (Max) @ Id, Vgs37 mOhm @ 12A, 10VOperating Temperature-55°C ~ 175°C (TJ)Mounting TypeSurface MountSupplier Device PackageTO-252, (D-Pak)Package / CaseTO-252-3, DPak (2 Leads + Tab), SC-63	Series	-
Drain to Source Voltage (Vdss) 30V Current - Continuous Drain (Id) @ 25°C 8A (Ta), 19A (Tc) Drive Voltage (Max Rds On, Min Rds On) 4.5V, 10V Vgs(th) (Max) @ Id 3V @ 250µA Gate Charge (Qg) (Max) @ Vgs 6.6nC @ 10V Input Capacitance (Ciss) (Max) @ Vds 360pF @ 15V Vgs (Max) ±20V FET Feature - Power Dissipation (Max) 4.2W (Ta), 21W (Tc) Rds On (Max) @ Id, Vgs 37 mOhm @ 12A, 10V Operating Temperature -55°C ~ 175°C (TJ) Mounting Type Surface Mount Supplier Device Package TO-252, (D-Pak) Package / Case TO-252-3, DPak (2 Leads + Tab), SC-63	FET Type	N-Channel
Current - Continuous Drain (Id) @ 25°С 8A (Ta), 19A (Tc) Drive Voltage (Max Rds On, Min Rds On) 4.5V, 10V Vgs(th) (Max) @ Id 3V @ 250µA Gate Charge (Qg) (Max) @ Vgs 6.6nC @ 10V Input Capacitance (Ciss) (Max) @ Vds 360pF @ 15V Vgs (Max) ±20V FET Feature - Power Dissipation (Max) 4.2W (Ta), 21W (Tc) Rds On (Max) @ Id, Vgs 37 mOhm @ 12A, 10V Operating Temperature -55°C ~ 175°C (TJ) Mounting Type Surface Mount Supplier Device Package TO-252, (D-Pak) Package / Case TO-252-3, DPak (2 Leads + Tab), SC-63	Technology	MOSFET (Metal Oxide)
Drive Voltage (Max Rds On, Min Rds On) 4.5V, 10V Vgs(th) (Max) @ Id 3V @ 250μA Gate Charge (Qg) (Max) @ Vgs 6.6nC @ 10V Input Capacitance (Ciss) (Max) @ Vds 360pF @ 15V Vgs (Max) ±20V FET Feature - Power Dissipation (Max) 4.2W (Ta), 21W (Tc) Rds On (Max) @ Id, Vgs 37 mOhm @ 12A, 10V Operating Temperature -55°C ~ 175°C (TJ) Mounting Type Surface Mount Supplier Device Package TO-252, (D-Pak) Package / Case TO-252-3, DPak (2 Leads + Tab), SC-63	Drain to Source Voltage (Vdss)	30V
Ygs(th) (Max) @ Id 3V @ 250μA Gate Charge (Qg) (Max) @ Vgs 6.6nC @ 10V Input Capacitance (Ciss) (Max) @ Vds 360pF @ 15V Ygs (Max) ±20V FET Feature - Power Dissipation (Max) 4.2W (Ta), 21W (Tc) Rds On (Max) @ Id, Vgs 37 mOhm @ 12A, 10V Operating Temperature -55°C ~ 175°C (TJ) Mounting Type Surface Mount Supplier Device Package TO-252, (D-Pak)	Current - Continuous Drain (Id) @ 25°C	8A (Ta), 19A (Tc)
Gate Charge (Qg) (Max) @ Vgs6.6nC @ 10VInput Capacitance (Ciss) (Max) @ Vds360pF @ 15VVgs (Max)±20VFET Feature-Power Dissipation (Max)4.2W (Ta), 21W (Tc)Rds On (Max) @ Id, Vgs37 mOhm @ 12A, 10VOperating Temperature-55°C ~ 175°C (TJ)Mounting TypeSurface MountSupplier Device PackageTO-252, (D-Pak)Package / CaseTO-252-3, DPak (2 Leads + Tab), SC-63	Drive Voltage (Max Rds On, Min Rds On)	4.5V, 10V
Input Capacitance (Ciss) (Max) @ Vds360pF @ 15VVgs (Max)±20VFET Feature-Power Dissipation (Max)4.2W (Ta), 21W (Tc)Rds On (Max) @ Id, Vgs37 mOhm @ 12A, 10VOperating Temperature-55°C ~ 175°C (TJ)Mounting TypeSurface MountSupplier Device PackageTO-252, (D-Pak)Package / CaseTO-252-3, DPak (2 Leads + Tab), SC-63	Vgs(th) (Max) @ Id	3V @ 250µA
Vgs (Max)±20VFET Feature-Power Dissipation (Max)4.2W (Ta), 21W (Tc)Rds On (Max) @ Id, Vgs37 mOhm @ 12A, 10VOperating Temperature-55°C ~ 175°C (TJ)Mounting TypeSurface MountSupplier Device PackageTO-252, (D-Pak)Package / CaseTO-252-3, DPak (2 Leads + Tab), SC-63	Gate Charge (Qg) (Max) @ Vgs	6.6nC @ 10V
FET Feature-Power Dissipation (Max)4.2W (Ta), 21W (Tc)Rds On (Max) @ Id, Vgs37 mOhm @ 12A, 10VOperating Temperature-55°C ~ 175°C (TJ)Mounting TypeSurface MountSupplier Device PackageTO-252, (D-Pak)Package / CaseTO-252-3, DPak (2 Leads + Tab), SC-63	Input Capacitance (Ciss) (Max) @ Vds	360pF @ 15V
Power Dissipation (Max)4.2W (Ta), 21W (Tc)Rds On (Max) @ Id, Vgs37 mOhm @ 12A, 10VOperating Temperature-55°C ~ 175°C (TJ)Mounting TypeSurface MountSupplier Device PackageTO-252, (D-Pak)Package / CaseTO-252-3, DPak (2 Leads + Tab), SC-63	Vgs (Max)	±20V
Rds On (Max) @ Id, Vgs37 mOhm @ 12A, 10VOperating Temperature-55°C ~ 175°C (TJ)Mounting TypeSurface MountSupplier Device PackageTO-252, (D-Pak)Package / CaseTO-252-3, DPak (2 Leads + Tab), SC-63	FET Feature	-
Operating Temperature-55°C ~ 175°C (TJ)Mounting TypeSurface MountSupplier Device PackageTO-252, (D-Pak)Package / CaseTO-252-3, DPak (2 Leads + Tab), SC-63	Power Dissipation (Max)	4.2W (Ta), 21W (Tc)
Mounting TypeSurface MountSupplier Device PackageTO-252, (D-Pak)Package / CaseTO-252-3, DPak (2 Leads + Tab), SC-63	Rds On (Max) @ Id, Vgs	37 mOhm @ 12A, 10V
Supplier Device PackageTO-252, (D-Pak)Package / CaseTO-252-3, DPak (2 Leads + Tab), SC-63	Operating Temperature	-55°C ~ 175°C (TJ)
Package / Case TO-252-3, DPak (2 Leads + Tab), SC-63	Mounting Type	Surface Mount
	Supplier Device Package	TO-252, (D-Pak)
Report errors?	Package / Case	TO-252-3, DPak (2 Leads + Tab), SC-63
		Report errors?

AOD4102 Guarantees



Quality Guarantees

We provide 90 days warranty. * If the items you received were not in perfect quality, we would be responsible for your refund or replacement, but the items must be returned in their original condition.

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Service Guarantees

We guarantee 100% customer satisfaction. Our experienced sales team and tech support team back our services to satisfy all our customers.



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