



### DMNH6042SK3-13 Information

Part Number DMNH6042SK3-13 Manufacturer Diodes Incorporated

Category Discrete Semiconductor Products Transistors - FETs, MOSFETs - Single

MOSFET NCH 60V 25A TO252

**Description** 

Package TO-252-5, DPak (4 Leads + Tab), TO-252AD

Website: https://www.heisener.com For Reference Only

E-mail: salesdept@heisener.com

For the pricing/inventory/lead time, please contact



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## **Certified Quality**

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# **DMNH6042SK3-13 Specifications**

Manufacturer Part Number         DMNH60428K3-13           Manufacturer         Diodes Incorporated           Category         Discrete Semiconductor Products           Transistors - FETs, MOSFETs - Single           Package         TO-252-5, DPak (4 Leads + Tab), TO-252AD           Series         Automotive, AEC-Q101           FET Type         N-Channel           Technology         MOSFET (Metal Oxide)           Drain to Source Voltage (Vdss)         60V           Current - Continuous Drain (Id) @ 25°C         25A (Tc)           Drive Voltage (Max Rds On, Min Rds On)         4.5V, 10V           Vgs(th) (Max) @ Id         3V @ 250µA           Gate Charge (Qg) (Max) @ Vgs         8.8nC @ 10V           Input Capacitance (Ciss) (Max) @ Vds         492pF @ 25V           Vgs (Max)         ±20V           FET Feature         -           Power Dissipation (Max)         2W (Ta)           Rds On (Max) @ Id, Vgs         50 mOhm @ 6A, 10V           Operating Temperature         -55°C ~ 175°C (TJ)           Mounting Type         Surface Mount           Supplier Device Package         TO-252-4L           Package / Case         TO-252-5, DPak (4 Leads + Tab), TO-252AD		
Category         Discrete Semiconductor Products           Transistors - FETs, MOSFETs - Single           Package         TO-252-5, DPak (4 Leads + Tab), TO-252AD           Series         Automotive, AEC-Q101           FET Type         N-Channel           Technology         MOSFET (Metal Oxide)           Drain to Source Voltage (Vdss)         60V           Current - Continuous Drain (Id) @ 25°C         25A (Tc)           Drive Voltage (Max Rds On, Min Rds On)         4.5V, 10V           Vgs(th) (Max) @ Id         3V @ 250µA           Gate Charge (Qg) (Max) @ Vgs         8.8nC @ 10V           Input Capacitance (Ciss) (Max) @ Vds         492pF @ 25V           Vgs (Max)         ±20V           FET Feature         -           Power Dissipation (Max)         2W (Ta)           Rds On (Max) @ Id, Vgs         50 mOhm @ 6A, 10V           Operating Temperature         -55°C ~ 175°C (TJ)           Mounting Type         Surface Mount           Supplier Device Package         TO-252-4L           Package / Case         TO-252-5, DPak (4 Leads + Tab), TO-252AD	Manufacturer Part Number	DMNH6042SK3-13
Package         TO-252-5, DPak (4 Leads + Tab), TO-252AD           Series         Automotive, AEC-Q101           FET Type         N-Channel           Technology         MOSFET (Metal Oxide)           Drain to Source Voltage (Vdss)         60V           Current - Continuous Drain (Id) @ 25°C         25A (Tc)           Drive Voltage (Max Rds On, Min Rds On)         4.5V, 10V           Vgs(th) (Max) @ Id         3V @ 250μA           Gate Charge (Qg) (Max) @ Vgs         8.8nC @ 10V           Input Capacitance (Ciss) (Max) @ Vds         492pF @ 25V           Vgs (Max)         ±20V           FET Feature         -           Power Dissipation (Max)         2W (Ta)           Rds On (Max) @ Id, Vgs         50 mOhm @ 6A, 10V           Operating Temperature         -55°C ~ 175°C (TJ)           Mounting Type         Surface Mount           Supplier Device Package         TO-252-4L           Package / Case         TO-252-5, DPak (4 Leads + Tab), TO-252AD	Manufacturer	Diodes Incorporated
Package TO-252-5, DPak (4 Leads + Tab), TO-252AD  Series Automotive, AEC-Q101  FET Type N-Channel  Technology MOSFET (Metal Oxide)  Drain to Source Voltage (Vdss) 60V  Current - Continuous Drain (Id) @ 25°C 25A (Tc)  Drive Voltage (Max Rds On, Min Rds On) 4.5V, 10V  Vgs(th) (Max) @ Id 3V @ 250µA  Gate Charge (Qg) (Max) @ Vgs 8.8nC @ 10V  Input Capacitance (Ciss) (Max) @ Vds 492pF @ 25V  Vgs (Max) ±20V  FET Feature  Power Dissipation (Max) 2W (Ta)  Rds On (Max) @ Id, Vgs 50 mOhm @ 6A, 10V  Operating Temperature -55°C ~ 175°C (TJ)  Mounting Type Surface Mount  Supplier Device Package TO-252-4L  Package / Case TO-252-5, DPak (4 Leads + Tab), TO-252AD	Category	Discrete Semiconductor Products
SeriesAutomotive, AEC-Q101FET TypeN-ChannelTechnologyMOSFET (Metal Oxide)Drain to Source Voltage (Vdss)60VCurrent - Continuous Drain (Id) @ 25°C25A (Tc)Drive Voltage (Max Rds On, Min Rds On)4.5V, 10VVgs(th) (Max) @ Id3V @ 250μAGate Charge (Qg) (Max) @ Vgs8.8nC @ 10VInput Capacitance (Ciss) (Max) @ Vds492pF @ 25VVgs (Max)±20VFET Feature-Power Dissipation (Max)2W (Ta)Rds On (Max) @ Id, Vgs50 mOhm @ 6A, 10VOperating Temperature-55°C ~ 175°C (TJ)Mounting TypeSurface MountSupplier Device PackageTO-252-4LPackage / CaseTO-252-5, DPak (4 Leads + Tab), TO-252AD		Transistors - FETs, MOSFETs - Single
FET Type  N-Channel  Technology  MOSFET (Metal Oxide)  60V  Current - Continuous Drain (Id) @ 25°C  Drive Voltage (Max Rds On, Min Rds On)  Vgs(th) (Max) @ Id  Gate Charge (Qg) (Max) @ Vgs  Input Capacitance (Ciss) (Max) @ Vds  Vgs (Max)  #20V  FET Feature  - Power Dissipation (Max)  Rds On (Max) @ Id, Vgs  Operating Temperature  -55°C ~ 175°C (TJ)  Mounting Type  Surface Mount  Supplier Device Package  TO-252-4L  Package / Case  MOSFET (Metal Oxide)  MOSFET (Metal Oxide)  #400 V	Package	TO-252-5, DPak (4 Leads + Tab), TO-252AD
TechnologyMOSFET (Metal Oxide)Drain to Source Voltage (Vdss)60VCurrent - Continuous Drain (Id) @ 25°C25A (Tc)Drive Voltage (Max Rds On, Min Rds On)4.5V, 10VVgs(th) (Max) @ Id3V @ 250μAGate Charge (Qg) (Max) @ Vgs8.8nC @ 10VInput Capacitance (Ciss) (Max) @ Vds492pF @ 25VVgs (Max)±20VFET Feature-Power Dissipation (Max)2W (Ta)Rds On (Max) @ Id, Vgs50 mOhm @ 6A, 10VOperating Temperature-55°C ~ 175°C (TJ)Mounting TypeSurface MountSupplier Device PackageTO-252-4LPackage / CaseTO-252-5, DPak (4 Leads + Tab), TO-252AD	Series	Automotive, AEC-Q101
Drain to Source Voltage (Vdss)60VCurrent - Continuous Drain (Id) @ 25°C25A (Tc)Drive Voltage (Max Rds On, Min Rds On)4.5V, 10VVgs(th) (Max) @ Id3V @ 250μAGate Charge (Qg) (Max) @ Vgs8.8nC @ 10VInput Capacitance (Ciss) (Max) @ Vds492pF @ 25VVgs (Max)±20VFET Feature-Power Dissipation (Max)2W (Ta)Rds On (Max) @ Id, Vgs50 mOhm @ 6A, 10VOperating Temperature-55°C ~ 175°C (TJ)Mounting TypeSurface MountSupplier Device PackageTO-252-4LPackage / CaseTO-252-5, DPak (4 Leads + Tab), TO-252AD	FET Type	N-Channel
Current - Continuous Drain (Id) @ 25°C  Drive Voltage (Max Rds On, Min Rds On)  Vgs(th) (Max) @ Id  Gate Charge (Qg) (Max) @ Vgs  Input Capacitance (Ciss) (Max) @ Vds  Vgs (Max)  FET Feature  Power Dissipation (Max)  Rds On (Max) @ Id, Vgs  Operating Temperature  Supplier Device Package  Package / Case  25A (Tc)  250 μΑ  3V @ 250μΑ  492pF @ 25V  70 (Ta)  50 mOhm @ 6A, 10V  70 mOhm @ 6A, 10V  70 mOhm @ 6A, 10V  70 mOhm @	Technology	MOSFET (Metal Oxide)
Drive Voltage (Max Rds On, Min Rds On)4.5V, 10VVgs(th) (Max) @ Id3V @ 250μAGate Charge (Qg) (Max) @ Vgs8.8nC @ 10VInput Capacitance (Ciss) (Max) @ Vds492pF @ 25VVgs (Max)±20VFET Feature-Power Dissipation (Max)2W (Ta)Rds On (Max) @ Id, Vgs50 mOhm @ 6A, 10VOperating Temperature-55°C ~ 175°C (TJ)Mounting TypeSurface MountSupplier Device PackageTO-252-4LPackage / CaseTO-252-5, DPak (4 Leads + Tab), TO-252AD	Drain to Source Voltage (Vdss)	60V
Vgs(th) (Max) @ Id  Gate Charge (Qg) (Max) @ Vgs  Input Capacitance (Ciss) (Max) @ Vds  Vgs (Max)  FET Feature  Power Dissipation (Max)  Rds On (Max) @ Id, Vgs  Operating Temperature  Surplier Device Package  Package / Case  3V @ 250μA  8.8nC @ 10V  492pF @ 25V   492pF @ 25V   2W (Ta)  50 mOhm @ 6A, 10V  CTJ)  Surface Mount  TO-252-4L  TO-252-5, DPak (4 Leads + Tab), TO-252AD	Current - Continuous Drain (Id) @ 25°C	25A (Tc)
Gate Charge (Qg) (Max) @ Vgs  Input Capacitance (Ciss) (Max) @ Vds  492pF @ 25V  Vgs (Max)  ±20V  FET Feature  Power Dissipation (Max)  Rds On (Max) @ Id, Vgs  50 mOhm @ 6A, 10V  Operating Temperature  -55°C ~ 175°C (TJ)  Mounting Type  Surface Mount  Supplier Device Package  TO-252-4L  Package / Case  8.8nC @ 10V  492pF @ 25V  25V  Example 10V  492pF @ 25V  Example 25V  Example 25V  Example 25V  FET Feature  -50°C ~ 175°C (TJ)  Surface Mount  TO-252-4L  TO-252-5, DPak (4 Leads + Tab), TO-252AD	Drive Voltage (Max Rds On, Min Rds On)	4.5V, 10V
Input Capacitance (Ciss) (Max) @ Vds  Vgs (Max)  ET Feature  Power Dissipation (Max)  Rds On (Max) @ Id, Vgs  Operating Temperature  -55°C ~ 175°C (TJ)  Mounting Type  Surface Mount  Supplier Device Package  TO-252-4L  Package / Case  492pF @ 25V  492p	Vgs(th) (Max) @ Id	3V @ 250μA
Vgs (Max)±20VFET Feature-Power Dissipation (Max)2W (Ta)Rds On (Max) @ Id, Vgs50 mOhm @ 6A, 10VOperating Temperature-55°C ~ 175°C (TJ)Mounting TypeSurface MountSupplier Device PackageTO-252-4LPackage / CaseTO-252-5, DPak (4 Leads + Tab), TO-252AD	Gate Charge (Qg) (Max) @ Vgs	8.8nC @ 10V
FET Feature  Power Dissipation (Max)  Rds On (Max) @ Id, Vgs  50 mOhm @ 6A, 10V  Operating Temperature  -55°C ~ 175°C (TJ)  Mounting Type  Surface Mount  Supplier Device Package  TO-252-4L  Package / Case  TO-252-5, DPak (4 Leads + Tab), TO-252AD	Input Capacitance (Ciss) (Max) @ Vds	492pF @ 25V
Power Dissipation (Max)  Rds On (Max) @ Id, Vgs  50 mOhm @ 6A, 10V  Operating Temperature  -55°C ~ 175°C (TJ)  Mounting Type  Surface Mount  Supplier Device Package  TO-252-4L  Package / Case  TO-252-5, DPak (4 Leads + Tab), TO-252AD	Vgs (Max)	±20V
Rds On (Max) @ Id, Vgs50 mOhm @ 6A, 10VOperating Temperature-55°C ~ 175°C (TJ)Mounting TypeSurface MountSupplier Device PackageTO-252-4LPackage / CaseTO-252-5, DPak (4 Leads + Tab), TO-252AD	FET Feature	-
Operating Temperature  -55°C ~ 175°C (TJ)  Mounting Type  Surface Mount  TO-252-4L  Package / Case  TO-252-5, DPak (4 Leads + Tab), TO-252AD	Power Dissipation (Max)	2W (Ta)
Mounting Type Surface Mount  Supplier Device Package TO-252-4L  Package / Case TO-252-5, DPak (4 Leads + Tab), TO-252AD	Rds On (Max) @ Id, Vgs	50 mOhm @ 6A, 10V
Supplier Device Package TO-252-4L Package / Case TO-252-5, DPak (4 Leads + Tab), TO-252AD	Operating Temperature	-55°C ~ 175°C (TJ)
Package / Case TO-252-5, DPak (4 Leads + Tab), TO-252AD	Mounting Type	Surface Mount
	Supplier Device Package	TO-252-4L
Report errors?	Package / Case	TO-252-5, DPak (4 Leads + Tab), TO-252AD
		Report errors?

#### DMNH6042SK3-13 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.



#### **Service Guarantees**

We guarantee 100% customer satisfaction.

Our experienced sales team and tech support team back our services to satisfy all our customers.

### DMNH6042SK3-13 Payment Methods



















## DMNH6042SK3-13 Shipping Methods













If you have any question about DMNH6042SK3-13, please do not hesitate to contact us!

Website: https://www.heisener.com E-mail: salesdept@heisener.com