

General Description

- Trench Power MV MOSFET Technology
- DFN5x6 Top Exposed
- Low $R_{DS(ON)}$
- Low Gate Charge
- RoHS 2.0 and Halogen-Free Compliant

Applications

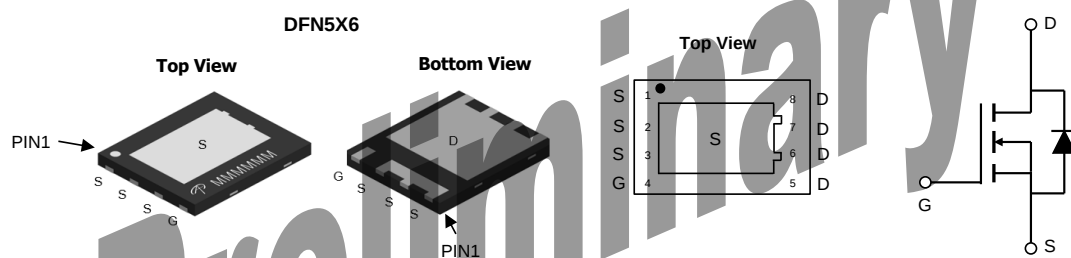
- High-frequency Switching FET

Product Summary

V_{DS}	60V
I_D (at $V_{GS}=10V$)	264A
$R_{DS(ON)}$ (at $V_{GS}=10V$)	< 1.35m Ω
$R_{DS(ON)}$ (at $V_{GS}=8V$)	< 1.5m Ω

100% UIS Tested
100% Rg Tested

Max Tj=175°C



Orderable Part Number	Package Type	Form	Minimum Order Quantity
AONA66642	DFN 5x6	Tape & Reel	5000

Absolute Maximum Ratings $T_A=25^\circ\text{C}$ unless otherwise noted

Parameter	Symbol	Maximum	Units
Drain-Source Voltage	V_{DS}	60	V
Gate-Source Voltage	V_{GS}	± 20	V
Continuous Drain Current	I_D	264	A
		186	
Pulsed Drain Current ^C	I_{DM}	1056	
Continuous Drain Current	I_{DSM}	49	A
		41	
Avalanche Current ^C	I_{AS}	67	A
Avalanche energy	E_{AS}	673	mJ
Power Dissipation ^B	P_D	214	W
		107	
Power Dissipation ^A	P_{DSM}	7.5	W
		5.2	
Junction and Storage Temperature Range	T_J, T_{STG}	-55 to 175	$^\circ\text{C}$

Thermal Characteristics

Parameter	Symbol	Typ	Max	Units
Maximum Junction-to-Ambient ^A	$R_{\theta JA}$	15	20	$^\circ\text{C/W}$
Maximum Junction-to-Ambient ^{A, D}	$R_{\theta JA}$	40	50	$^\circ\text{C/W}$
Maximum Junction-to-Case, bottom	$R_{\theta JC}$	0.4	0.75	$^\circ\text{C/W}$
Maximum Junction-to-Case, top	$R_{\theta JC}$	0.35	0.7	$^\circ\text{C/W}$