

100V 6.0m N-Ch Power MOSFET

Features

- Ç Ultra-low ON-resistance $R_{DS(ON)}$
- Ç Low Gate Charge, Q_g
- Ç 100% UIS and FT Tested
- Ç Pb-free Lead Plating
- Ç Halogen-free and RoHS-compliant
- Ç AEC-Q101 Qualified for Automotive Applications

Product Summary

Parameter	Value	Unit
V_{DS}	100	V
$V_{GS(th_Typ)}$	1.8	V
I_D (@ $V_{GS} = 10V$) ⁽¹⁾	88	A
$R_{DS(ON_Typ)}$ (@ $V_{GS} = 10V$)	6.0	m
$R_{DS(ON_Typ)}$ (@ $V_{GS} = 4.5V$)	8.0	m

Pin Configuration
Top View

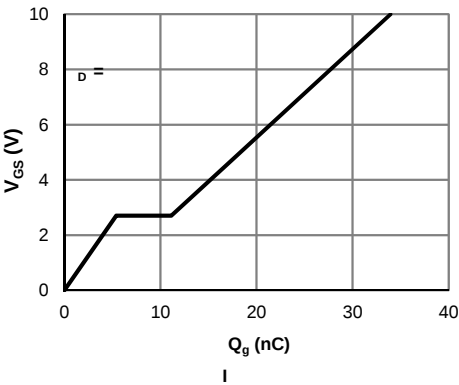
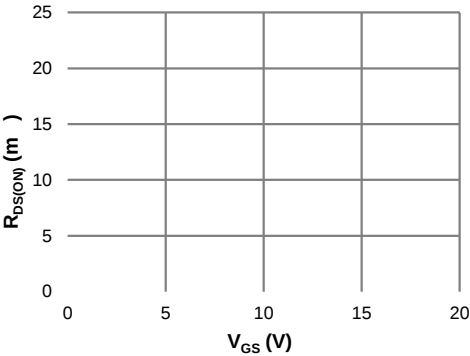


Ordering Information

Device	Package	# of Pins	Marking	MSL	T_J (°C)	Media	Quantity (pcs)
JMSL1008AGQ-13	PDFN5x6-8L	8	SL1008AQ	1	-55 to 175	13-inch Reel	5000

Absolute Maximum Ratings (@ $T_{cl} = 25^{\circ}C$ unless otherwise specified)

Parameter	Symbol	Value	Unit
Drain-to-Source Voltage	V_{DS}	100	V
Gate-to-Source Voltage	V_{GS}	± 20	V
Continuous Drain Current ⁽¹⁾	I_D	88	A
		62	
Pulsed Drain Current ⁽²⁾	I_{DM}	351	A
Avalanche Current ⁽³⁾	I_{AS}	28	A
Avalanche Energy ⁽³⁾	E_{AS}	118	mJ
Power Dissipation ⁽⁴⁾	P_D	125	W
		63	
Junction & Storage Temperature Range	T_J, T_{STG}	-55 to 175	°C





Symbol	Min.	Typ.	Max.	Unit
$V_{(BR)DSS}$ $V_{DS} = 80V, V_{GS} = 0V$ T_J	100		1.0	V



[illegible]



Typical Electrical & Thermal Characteristics

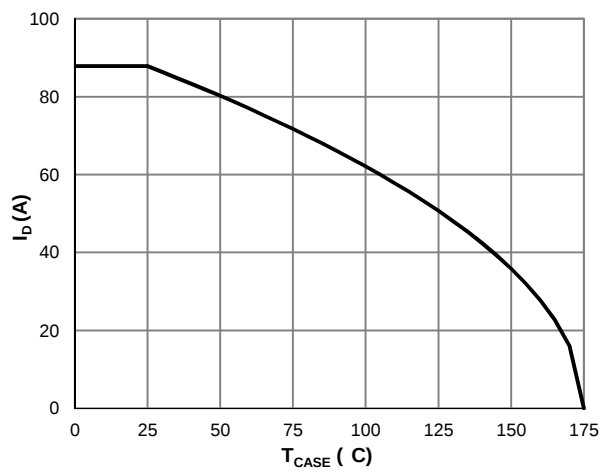


Figure 7: Current De-rating

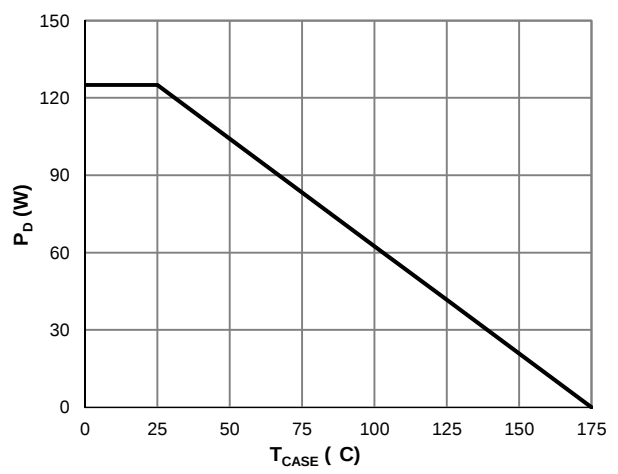


Figure 8: Power De-rating

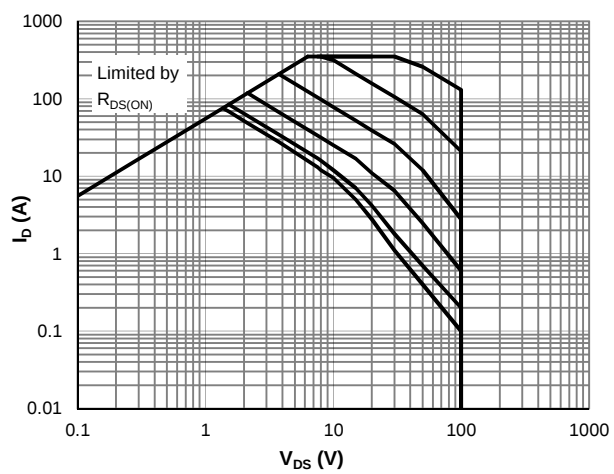
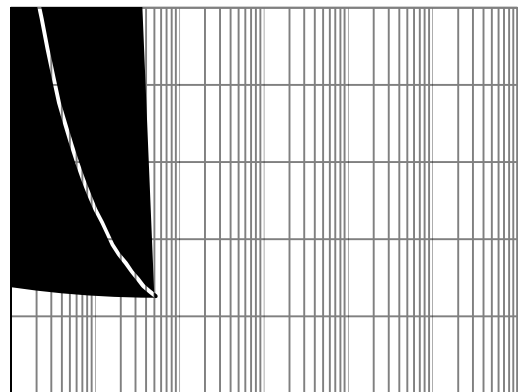
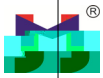


Figure 9: Maximum Safe Operating





JMSL1008AGQ

PDFN5x6-8L Package Information

