



JMSL0630AU

N-Ch Power MOSFET

Product Summary

Parameter	Value	Unit
V_{DS}	60	V
$V_{GS(th)}$	1.7	V
I_D (@ $V_{GS} = 10V$) ⁽¹⁾	20	A
$R_{DS(ON)}$ (@ $V_{GS} = 10V$)	22	m Ω
$R_{DS(ON)}$ (@ $V_{GS} = 4.5V$)	30	m Ω

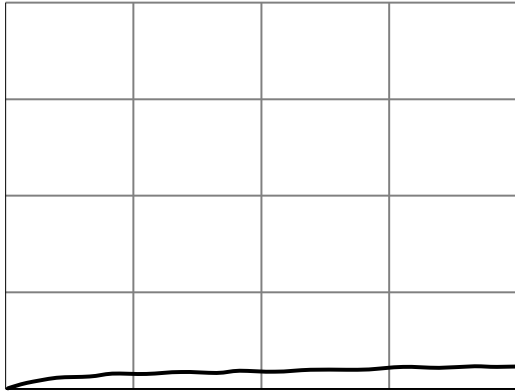
ns	Marking	MSL	T_J (°C)	Media	Quantity (pcs)
	SL0630A	1	-55 to 150	13-inch Reel	5000

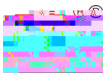
(unless otherwise specified)

Parameter	Value	Unit
V_{DS}	60	V
V_{GS}	± 20	V
I_D (@ $V_{GS} = 10V$)	19.8	A
I_D (@ $V_{GS} = 4.5V$)	12.5	
$R_{DS(ON)}$ (@ $V_{GS} = 10V$)	46	A
$R_{DS(ON)}$ (@ $V_{GS} = 4.5V$)	13.5	mJ
$I_{D(peak)}$	20	W
$I_{D(peak)}$	8.0	
T_J	-55 to 150	°C

	Symbol	Min.	Typ.	Max.	Unit
Gate Threshold Voltage	$V_{(BR)DSS}$	60			V
				1.0	
				5.0	
	I_{GSS}			±100	nA
	$V_{GS(th)}$	1.2	1.7	2.5	V
			22	27	mΩ
			30	38	mΩ
	g_{FS}		17.0		S
	V_{SD}		0.75	1.0	V
	I_S			20	A
	C_{iss}		288		pF
	C_{oss}		92		pF
	C_{rss}		22		pF
	R_g		5.0		Ω
	Q_g		5.8		nC
	Q_g				

Typical Electrical & Thermal Characteristics





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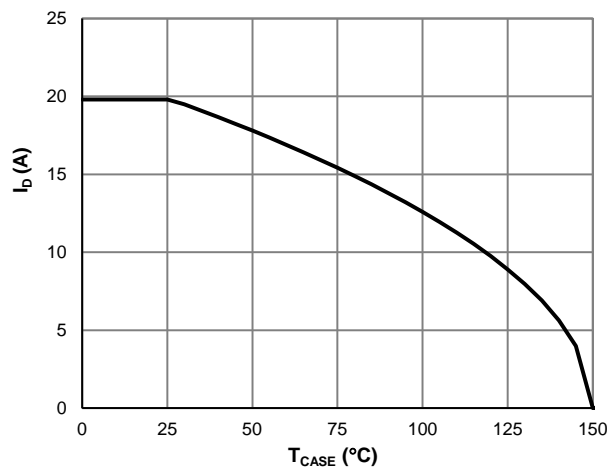


Figure 9: Current De-rating

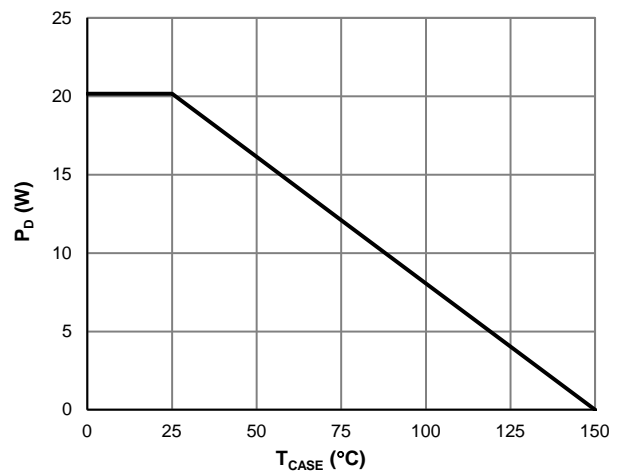


Figure 10: Power De-rating

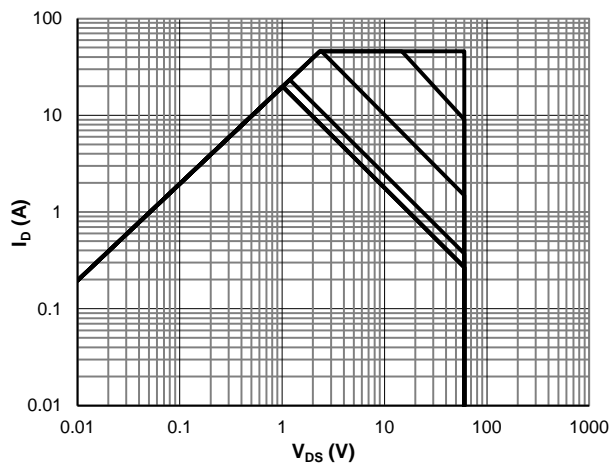
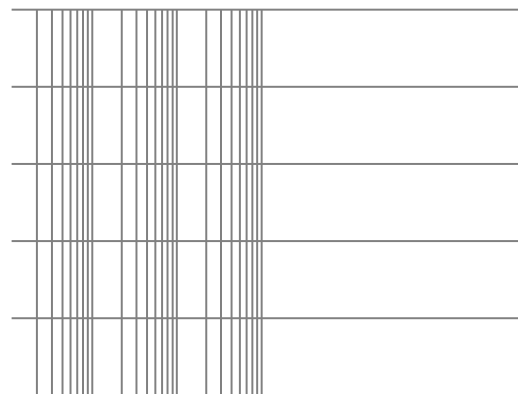
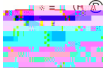
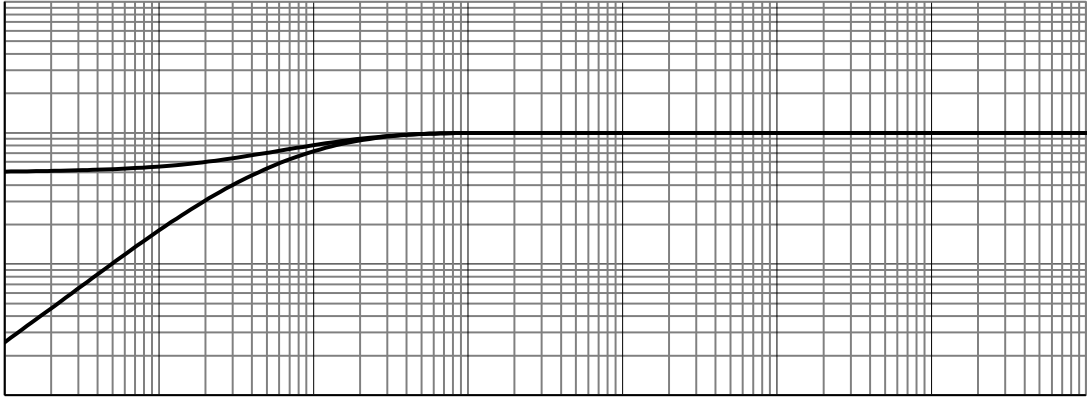


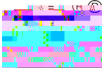
Figure 11: Maximum Safe Operating Area





Typical Electrical & Thermal Characteristics





PDFN3x3-8L Package Information

