



Product Summary

	Value	Unit
	100	V
	3.0	V
	159	A
	3.1	m

Package	# of Pins	Marking	MSL	T _j (°C)	Media	Quantity (pcs)
PDFN5x6-8L	8					





	Symbol	Min.	Typ.	Max.	Unit
	$V_{(BR)DSS}$	100			V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS} = 80V, V_{GS} = 0V$ $T_J = 55^{\circ}C$		1.0	A
Gate-Body Leakage Current	I_{GSS}	$V_{DS} = 0V, V_{GS} = \pm 20V$		5.0	nA
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS} = V_{GS}, I_D = 250\text{ }\mu A$		± 100	nA
	$R_{DS(on)}$	2.0	3.0	4.0	V
	g_{FS}		3.1	3.7	m
	V_{SD}		37		S
Diode Continuous Current	I_S		0.66	1.0	V
				159	A
	C_{iss}		6172		pF
	C_{oss}		854		pF
	C_{rss}		17		pF
	R_g		2.5		
	Q_g		89		nC
	Q_g		56		nC
	Q_{gs}		30		nC
	Q_{gd}		17		nC
	$t_{D(on)}$		25		ns
	t_r		34		ns
	$t_{D(off)}$		59		ns
	t_f		27		ns
Body Diode Reverse Recovery Time	t_{rr}	$I_F = 20A, di_F/dt = 100A/\mu s$		108	ns
	Q_{rr}		138		nC
	Symbol				Unit
	R_{JA}				$^{\circ}C/W$
	R_{JC}				$^{\circ}C/W$

Notes:

Typical Electrical & Thermal Characteristics

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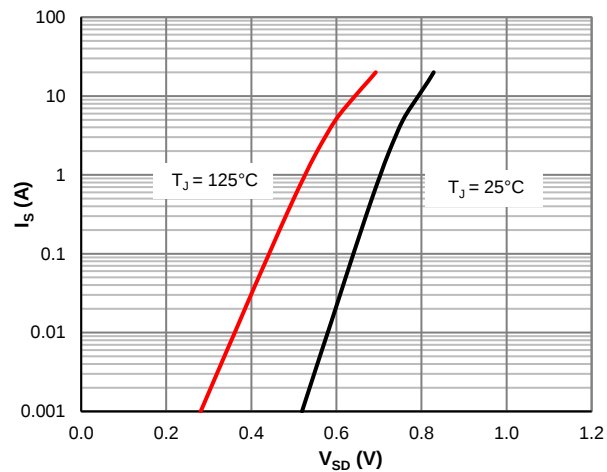


Figure 7: Body-Diode Characteristics

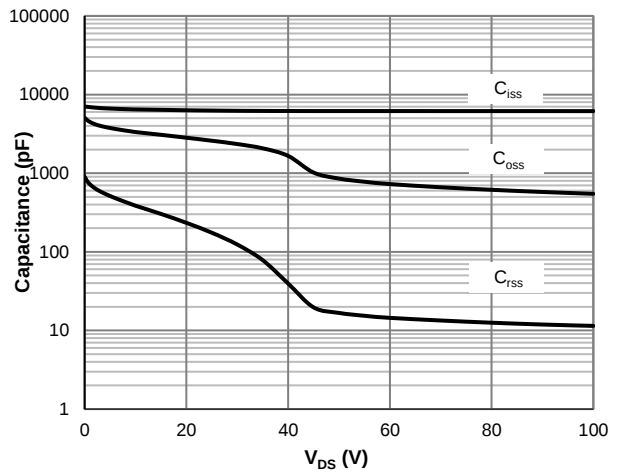


Figure 8: Capacitance Characteristics

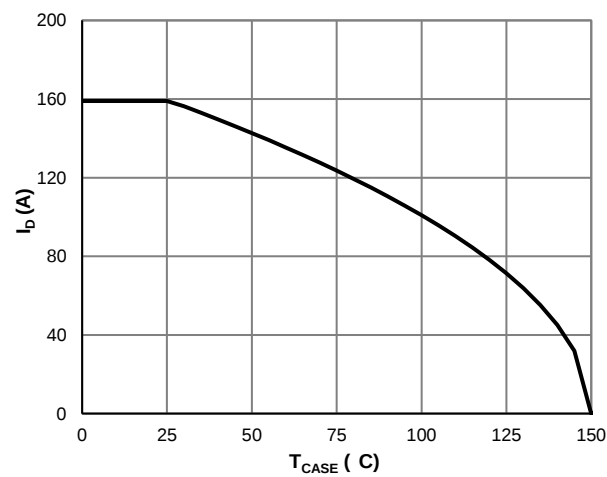


Figure 9: Current De-rating

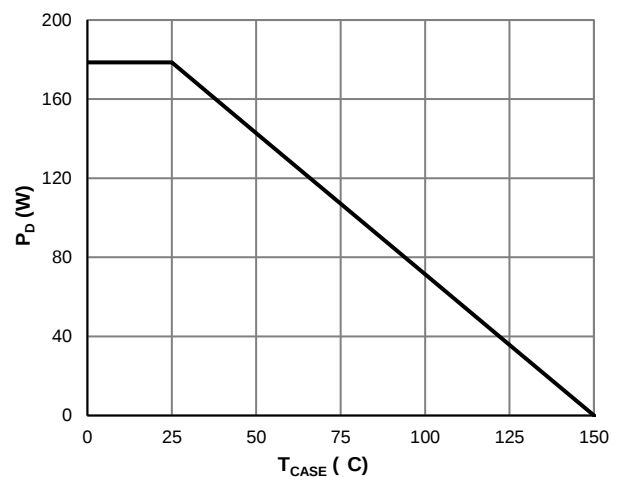


Figure 10: Power De-rating

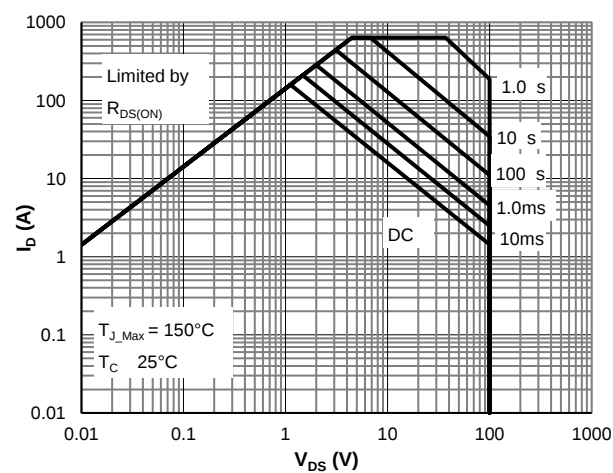


Figure 11: Maximum Safe Operating Area

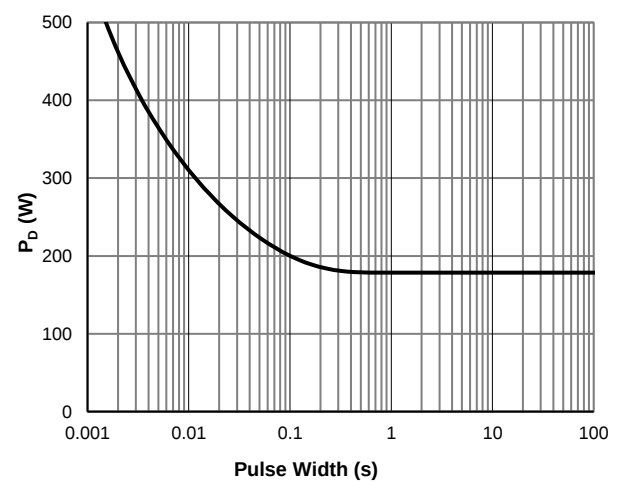
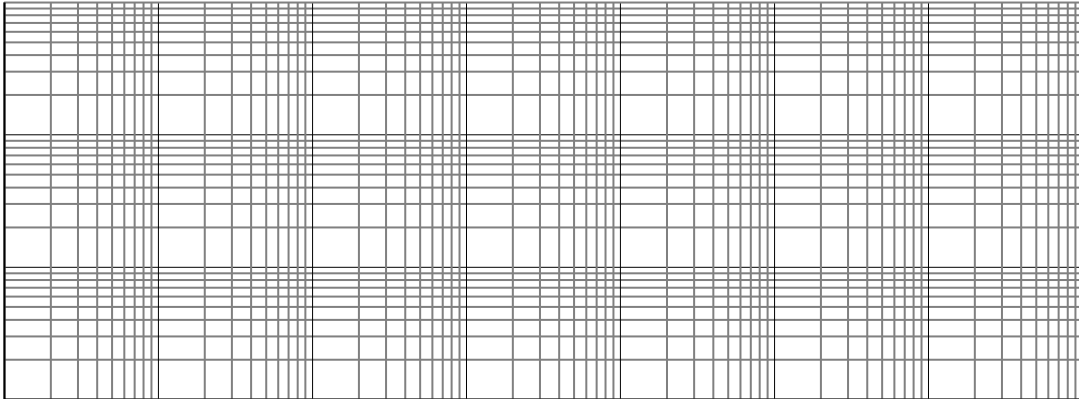


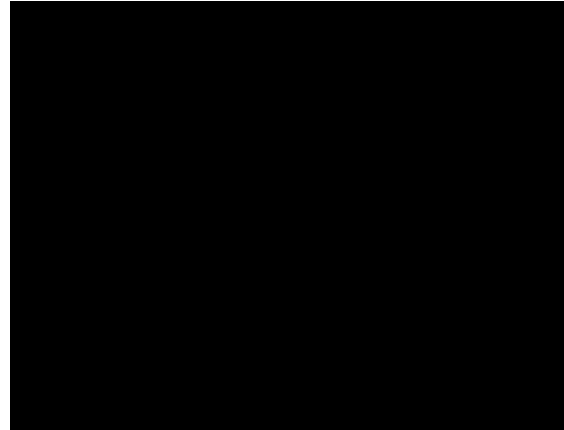
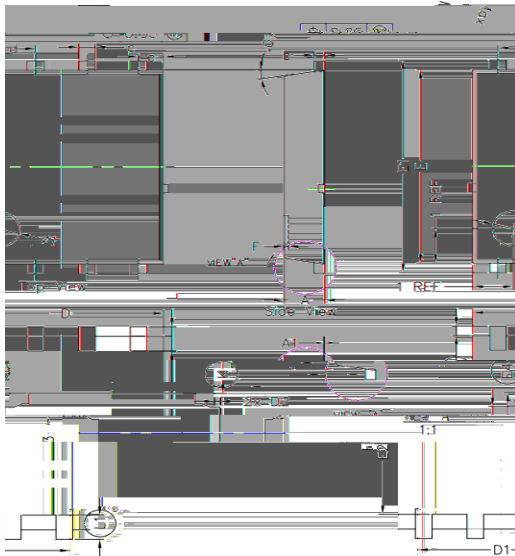
Figure 12: Single Pulse Power Rating, Junction-to-Case



Typical Electrical & Thermal Characteristics



PDFN5x6-8L Package Information



Recommended Soldering Paste

