JMH65R980APLN

650V SuperJunction Power MOSFET

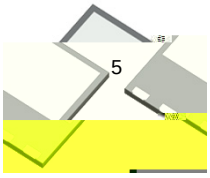
Features

Product Summary

Parameter	Value	Unit
V_{DS}	650	V
$V_{GS(th)\_Typ}$	3.5	V
I_D (@ V_{GS} = 10V) (1)	4.0	A
$R_{DS(ON)\_Typ}$ (@ V_{GS} = 10V)	890	m
E_{oss}@400V	0.68	J

Applications

- Telecom / Server Power Supplies
- Industrial Power Supplies
- UPS / Solar
- Lighting / Charger / Adapter



Ordering Information

Device	Package	# of Pins	Marking	MSL	T_J (°C)	Media	Quantity (pcs)
JMH65R980APLN-13	DFN8080-4L	4	H65R980A	1	-55 to 150	13-inch Reel	3000

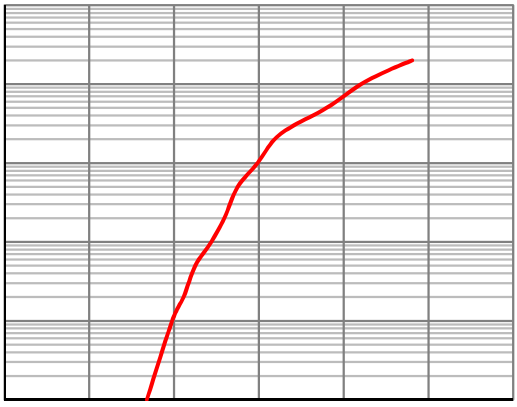
Absolute Maximum Ratings (@ T_A = 25°C unless otherwise specified)

Parameter		Symbol	Value	Unit
Drain-to-Source Voltage		V_{DS}	650	V
Gate-to-Source Voltage		V_{GS}	±20	V
Continuous Drain Current (1)	T_C = 25°C	I_D	4.0	A
	T_C = 100°C		2.4	
Pulsed Drain Current (2)		I_{DM}	16.0	A
Avalanche Current (3)		I_{AS}	4.0	A
Avalanche Energy (3)		E_{AS}	80	mJ
Power Dissipation (4)	T_C = 25°C	P_D	37	W
	T_C = 100°C		14.7	
Junction & Storage Temperature Range		T_J $_{STG}$	-55 to 150	°C

			I_D = 2.0A

	Symbol		Min.	Typ.	Max.	Unit
	$V_{(BR)DSS}$		650			V
	I_{DSS}	V_{DS} = 650V, V_{GS} = 0V			1.0	
	I_{GSS}				±100	nA
Gate Threshold Voltage	$V_{GS(th)}$		2.5	3.5	4.5	V
	$R_{DS(ON)}$			890	980	m
	V_{SD}			0.75		V
	I_S					

Typical Electrical & Thermal Characteristics



Typical Electrical & Thermal Characteristics

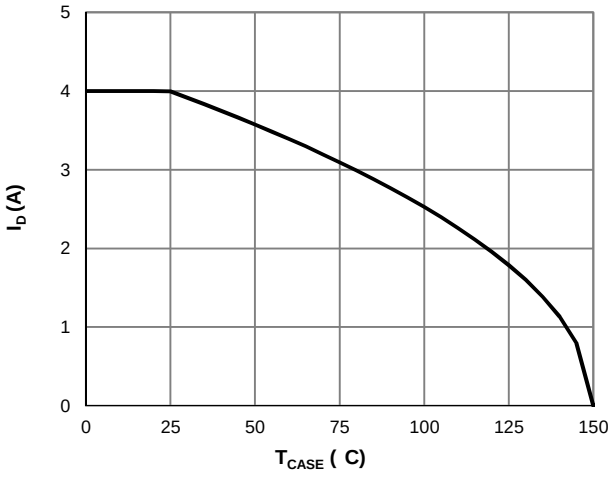


Figure 7: Current De-rating

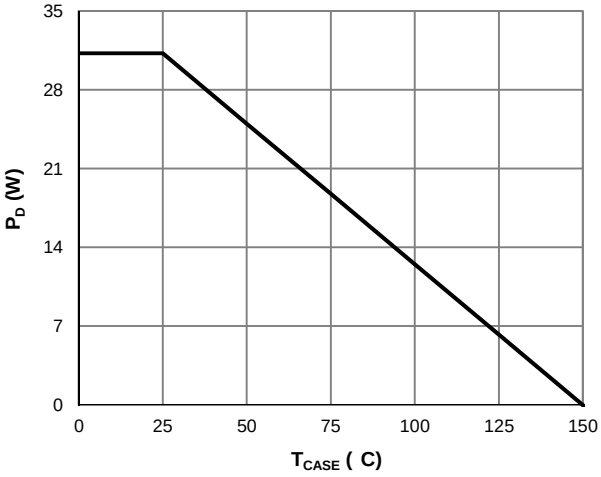


Figure 8: Power De-rating

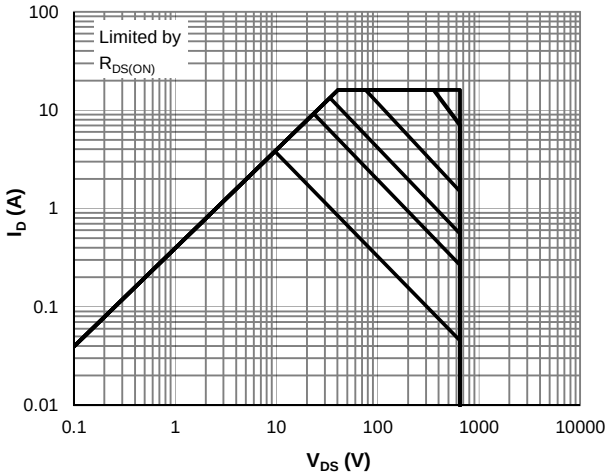
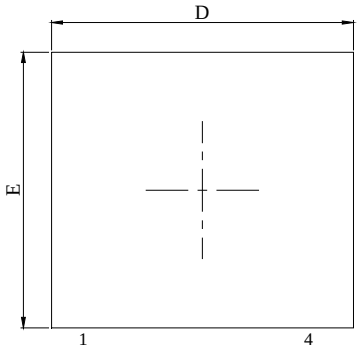


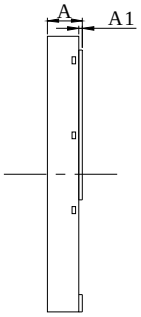
Figure 9: Maximum Safe Operating Area

DFN8080-4L Package Information

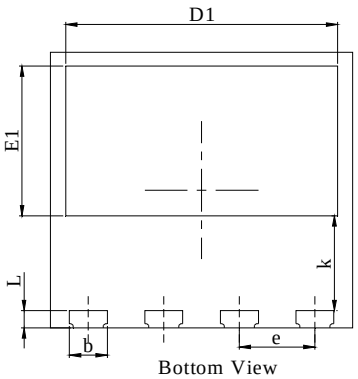
Package Outlines



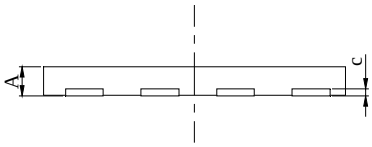
Top View



Side View



Bottom View



Front View

DIM.	MILLIMETER		
	MIN.	NOM.	MAX.
A	0.85	0.90	0.95
A1	--	--	0.05
b	0.95	1.00	1.05
c	--	0.20	--
D	7.90	8.00	8.10
D1	7.10	7.20	7.30
E	7.90	8.00	8.10
E1	4.25	4.35	4.45
L	0.40	0.50	0.60
k	2.75		
e	2.00 BSC		

Recommended Soldering Footprint