

HL020N090C1
MFE-EC, IC,
20 mΩ, 900 V, M2,
-247-3L
HL020N090C1

Features

- Typ. $R_{DS(on)} = 20 \text{ m}\Omega$ @ $V_{GS} = 15 \text{ V}$
- Typ. $R_{DS(on)} = 16 \text{ m}\Omega$ @ $V_{GS} = 18 \text{ V}$

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Table 1. THERMAL CHARACTERISTICS

Parameter	Symbol	Max	Unit
Thermal Resistance Junction-to-Case (Note 1)	$R_{\theta JC}$	0.30	°C/W
Thermal Resistance Junction-to-Ambient (Note 1)			

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Table 2. ELECTRICAL CHARACTERISTICS ($T_J = 25^\circ\text{C}$ unless otherwise stated)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
DRAIN-SOURCE DIODE CHARACTERISTICS						
Reverse Recovery Time	t_{RR}	$V_{GS} = -5/15\text{ V}, I_{SD} = 60\text{ A},$ $di_S/dt = 1000\text{ A}/\mu\text{s}, V_{DS} = 720\text{ V}$		28		ns
Reverse Recovery Charge	Q_{RR}			199		nC
Reverse Recovery Energy	E_{REC}			4		μJ
Peak Reverse Recovery Current	I_{RRM}			14		A
Charge Time	T_a			16		ns
Discharge Time	T_b			12		ns

Product parametric performance is indicated in the Electrical Characteristics for the listed test conditions, unless otherwise noted. Product performance may not be indicated by the Electrical Characteristics if operated under different conditions.

TYPICAL CHARACTERISTICS

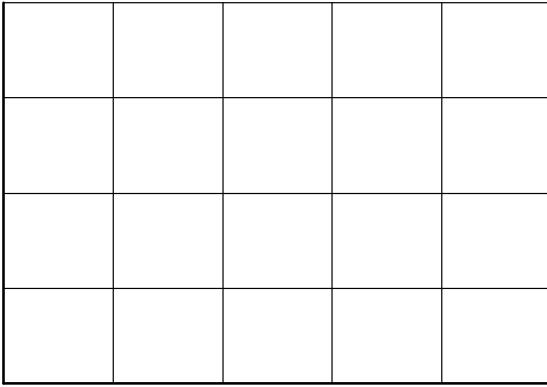


Figure 1. On-Region Characteristics

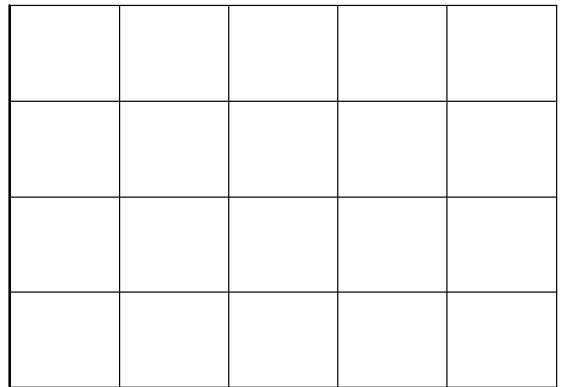


Figure 2. Normalized On-Resistance vs. Drain Current and Gate Voltage

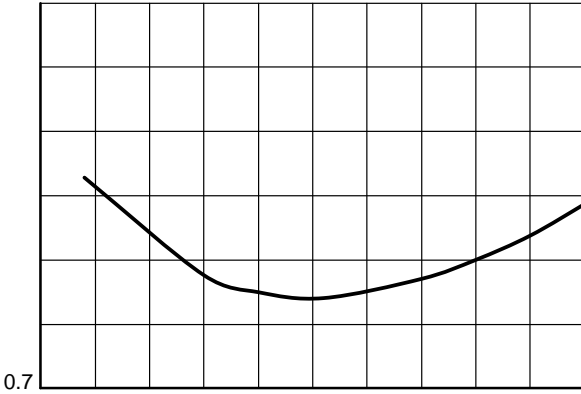


Figure 3. On-Resistance Variation with Temperature

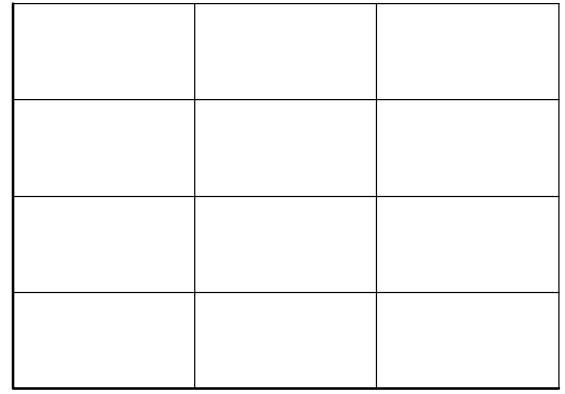
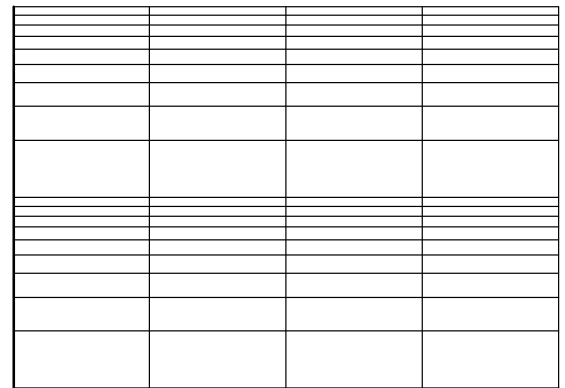
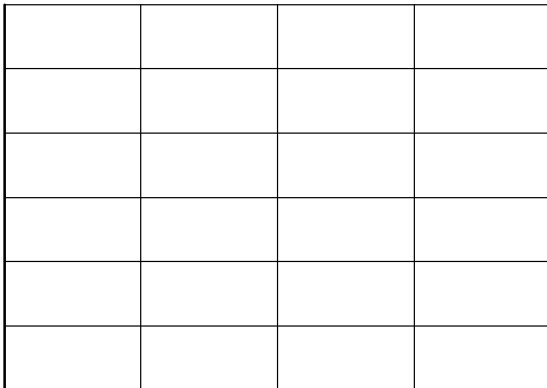


Figure 4. On-Resistance vs. Gate-to-Source Voltage



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TYPICAL CHARACTERISTICS (continued)

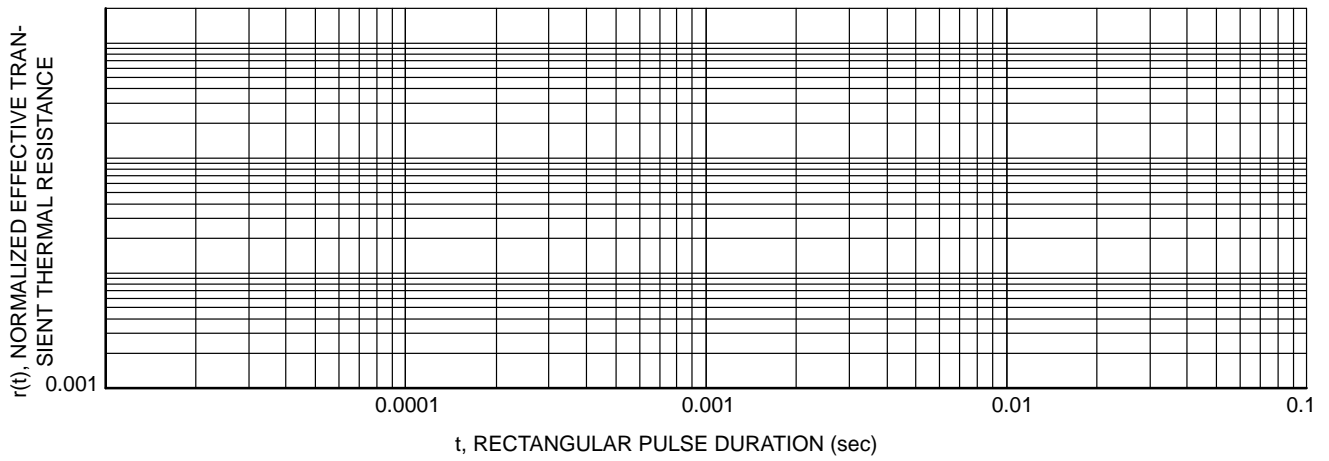


Figure 13. Junction-to-Ambient Transient Thermal Response Curve

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