

Features

- Typ. $R_{DS(on)} = 20\text{ m}\Omega$ @ $V_{GS} = 15\text{ V}$
 Typ. $R_{DS(on)} = 16\text{ m}\Omega$ @ $V_{GS} = 18\text{ V}$
- Ultra Low Gate Charge ($Q_{G(tot)} = 196\text{ nC}$)
- Low Effective Output Capacitance ($C_{oss} = 296\text{ pF}$)
- 100% UIL Tested
- This Device is Halide Free and RoHS Compliant with exemption 7a, Pb Free 2LI (on second level interconnection)

Typical Applications

- UPS
- DC-DC Converter
- Boost Inverter

MAXIMUM RATINGS ($T_J = 25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Value	Unit
Drain-to-Source Voltage	V_{DSS}	900	V
Gate-to-Source Voltage	V_{GS}	+22/-8	V
Recommended Operation Values of Gate-Source Voltage	$T_C < 175^\circ\text{C}$ V_{GSop}	+15/-5	V

Continuous Drain

9a899d2= 964 657n5.402 415.729 45M57n5.40S1 415..9213 .911 T5.40S2 0 9 399.0047 2.7 96465(ON(18 22 8 283TO 0 9 39D0 Tc87566/TT4 1 Tf.<00eff

NTH4L020N090SC1

Table 1. THERMAL CHARACTERISTICS

Parameter	Symbol	Max	Unit
Thermal Resistance Junction-to-Case (Note 1)	$R_{\theta JC}$	0.31	°C/W

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

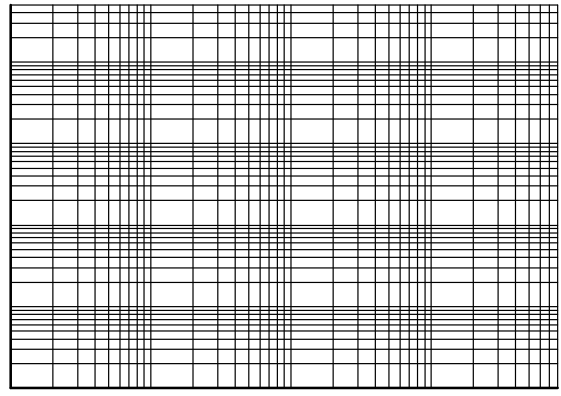
Parameter	Max	Unit
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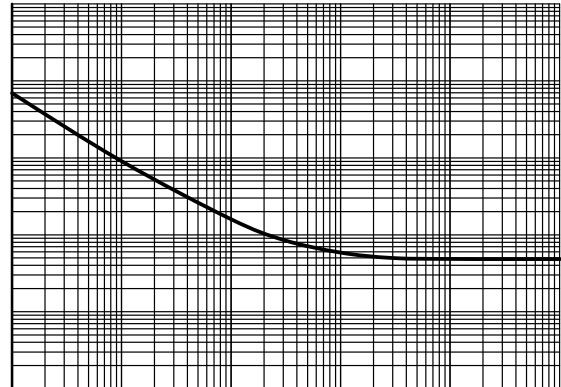
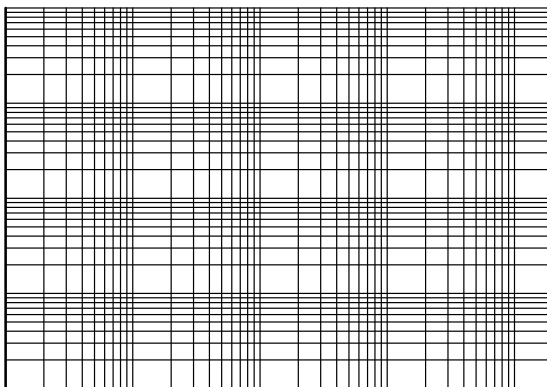
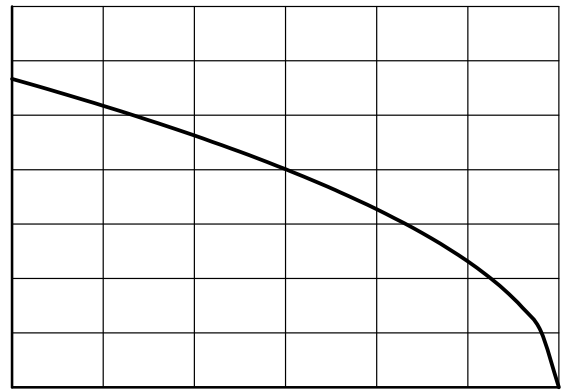
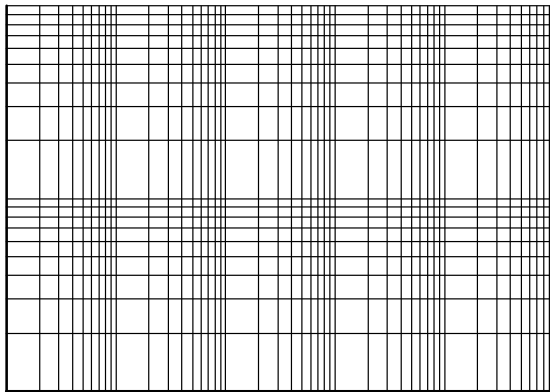
TYPICAL CHARACTERISTICS (continued)



Figure 7. Gate-to-Source Voltage vs. Total Charge



V_{DS}
Figure 8. Capacitance vs. Drain-to-Source Voltage



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