Silicon Carbide (SiC) MOSFET – EliteSiC, 65 mohm, 1200 V, M3S, TO-247-4L

NVH4L070N120M3S

Features

- Typ. $R_{DS(on)}$ = 65 mΩ @ V_{GS} = 18 V
- Ultra Low Gate Charge ($Q_{G(tot)}$ = 57 nC)
- High Speed Switching with Low Capacitance (C_{oss} = 57 pF)
- 100% Avalanche Tested
- AEC−Q101 Qualified and PPAP Capable
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Table 1. THERMAL CHARACTERISTICS

Parameter	Symbol	Max	Unit
Junction−to−Case − Steady State (Note 1)	$R_{\theta JC}$	0.94	°C/W
Junction−to−Ambient − Steady State (Note 1)	$R_{\theta JA}$	40	

Table 2. ELECTRICAL CHARACTERISTICS (T

Table 2. ELECTRICAL CHARACTERISTICS (T_J = 25°C unless otherwise specified) (continued)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
SOURCE DRAIN DIODE CHARACTERISTICS						
Reverse Recovery Time	t_{RR}	V_{GS} = −3/18 V, I_{SD} = 15 A, dI_S/dt = 1000 A/μs, V_{DS} = 800 V (Note 6)	–	14.4	–	ns
Reverse Recovery Charge	Q_{RR}		–	60	–	nC
Reverse Recovery Energy	E_{REC}		–	4.8	–	μJ
Peak Reverse Recovery Current	I_{RRM}		–	8.4	–	A
Charge Time	T_A		–	7.9	–	ns
Discharge Time	T_B		–	6.5	–	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.

5. E_{ON}/E_{OFF} result is with body diode.
6. Defined by design, not subject to production test.

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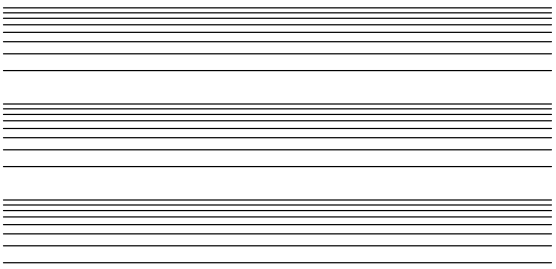
TYPICAL CHARACTERISTICS



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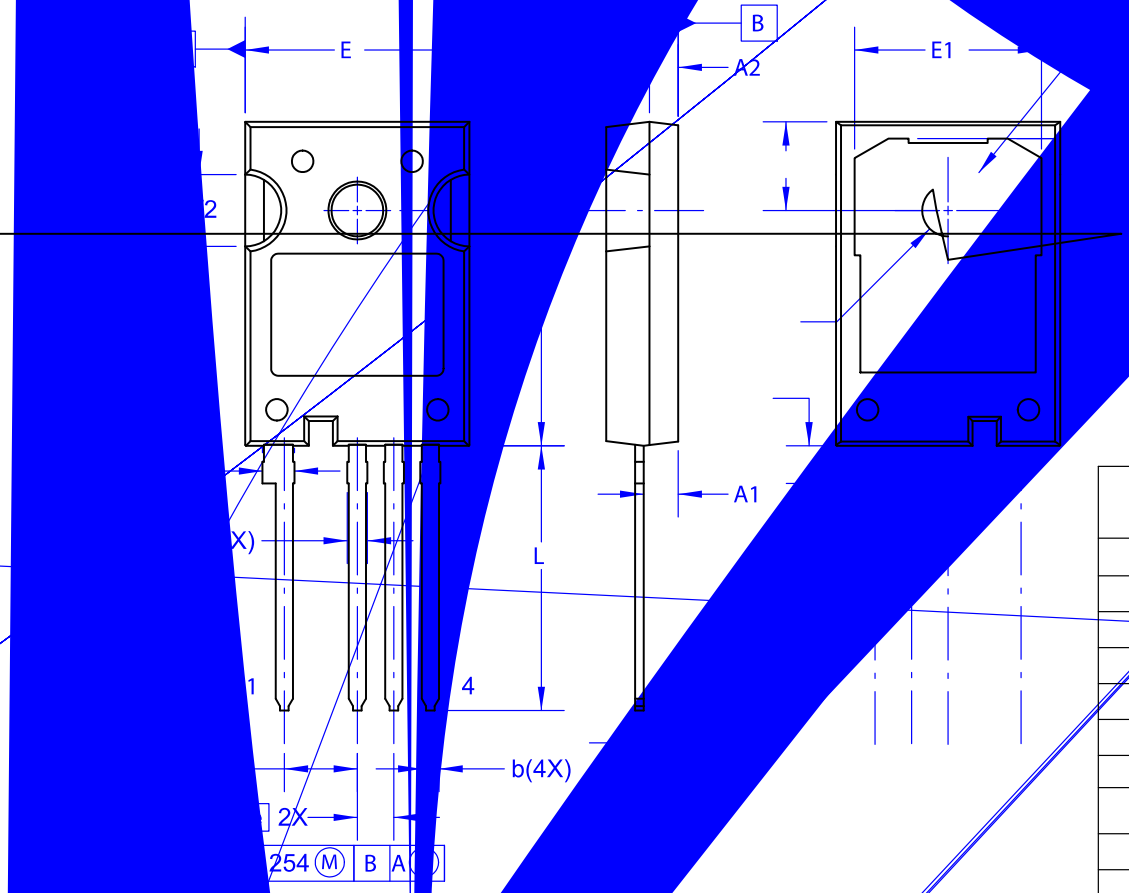

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