- ,
- , 24 -3
50 , 1 Ω,
025 0 5 1

Features

- Typ. $R_{DS(on)}$ = 19 mΩ @ V_{GS} = 18 V
  Typ. $R_{DS(on)}$ = 25 mΩ @ V_{GS} = 15 V
- Ultra Low Gate Charge ($Q_{G(tot)}$ = 164 nC)
- Low Capacitance (C_{oss} = 278 pF)
- 100% Avalanche Tested
- AEC−Q101 Qualified and PPAP Capable
- This Device is Pb−Free and is RoHS Compliant

Typical Applications

- Automotive On Board Charger
- Automotive DC/DC Converter for EV/HEV

MAXIMUM RATINGS (T_J = 25°C unless otherwise noted)

Parameter			Symbol	Value	Unit
Drain−to−Source Voltage			V_{DSS}	650	V
Gate−to−Source Voltage			V_{GS}	−8/+22	V
Recommended Operation Values of Gate−to−Source Voltage		T_C < 175°C	V_{GSop}	−5/+18	V
Continuous Drain Current (Note 1)	Steady State	T_C = 25°C	I_D	99	A
Power Dissipation (Note 1)			P_D	348	W
Continuous Drain Current (Note 1)	Steady State	T_C = 100°C	I_D	70	A
Power Dissipation (Note 1)			P_D	174	W
Pulsed Drain Current (Note 2)	T_C = 25°C		I_{DM}	323	A
Operating Junction and Storage Temperature Range			T_J, T_{stg}	−55 to +175	°C
Source Current (Body Diode)			I_S	75	A

Single Pulse Drain−to−

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THERMAL RESISTANCE MAXIMUM RATINGS

Parameter	Symbol	Max	Unit
Junction−to−Case − Steady State (Note 1)	$R_{\theta JC}$	0.43	°C/W
Junction−to−Ambient			

TYPICAL CHARACTERISTICS

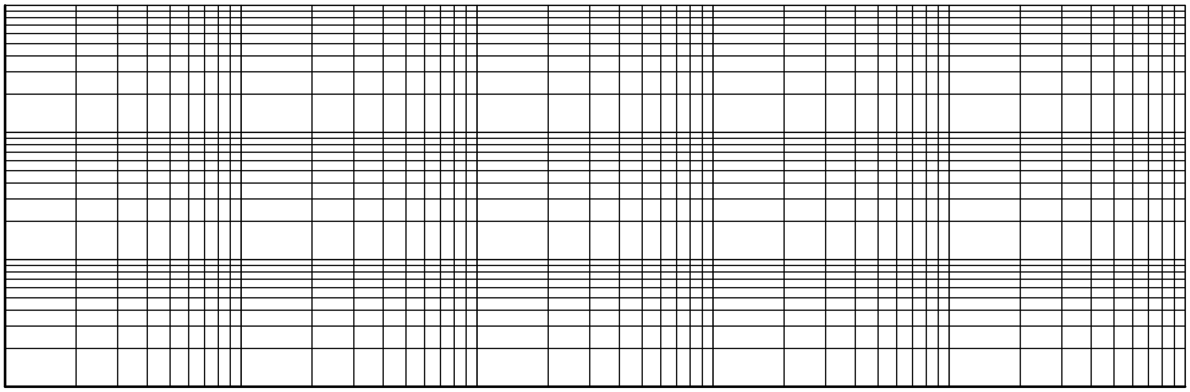

Figure 13. Junction to Case Thermal Response

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