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60 , , 900 , 2,
2 A -7

BG060 090S 1

Features

- Typ. $R_{DS(on)}$ = 60 mΩ @ V_{GS} = 15 V
- Typ. $R_{DS(on)}$ = 43 mΩ @ V_{GS} = 18 V
- Ultra Low Gate Charge ($Q_{G(tot)}$ = 88 nC)
- High Speed Switching with Low Capacitance (C_{oss} = 115 pF)
- 100% Avalanche Tested
- T_J = 175°C
- 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°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Drain−to−			
			°C
Source Current (Body Diode)	I_S	21	A
Single Pulse Drain−to−Source Avalanche Energy ($I_{L(pk)}$ = 18 A, L = 1 mH) (Note 4)			

Table 1. THERMAL RESISTANCE MAXIMUM RATINGS

Parameter	Symbol	Max	Unit
Junction−to−Case − Steady State (Note 2)	$R_{\theta JC}$	0.70	°C/W
Junction−to−Ambient − Steady State (Notes 1, 2)	$R_{\theta JA}$	41	

Table 2. ELECTRICAL CHARACTERISTICS (T_J = 25°C unless otherwise specified) **C unless=726 37.924Tm0 W**

TYPICAL CHARACTERISTICS

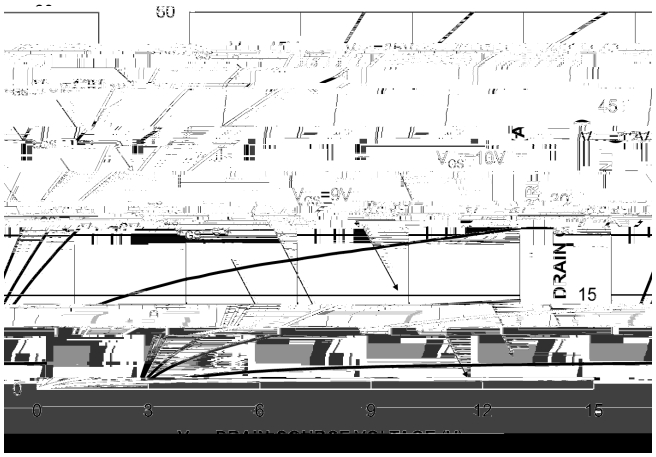

Figure 1. On Region Characteristics

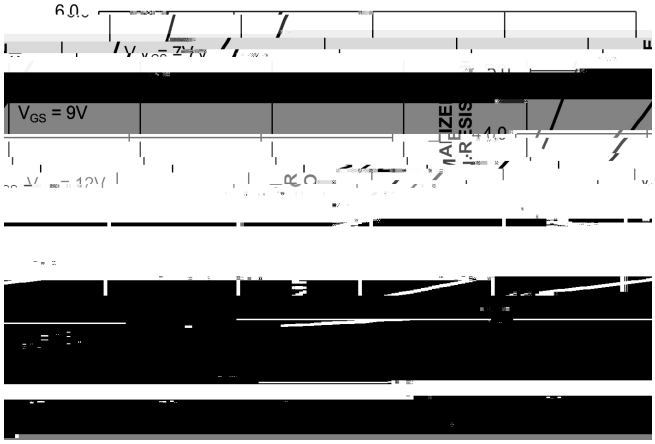

Figure 2. Normalized On Resistance vs. Drain Current and Gate Voltage

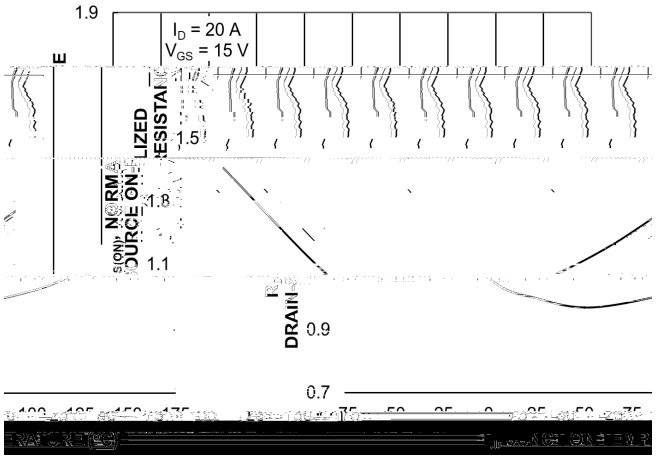

Figure 3. On Resistance Variation with Temperature

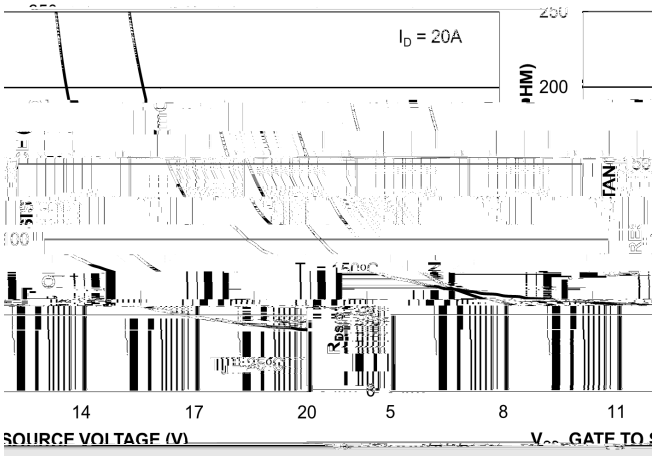

Figure 4. On Resistance vs. Gate to Source Voltage

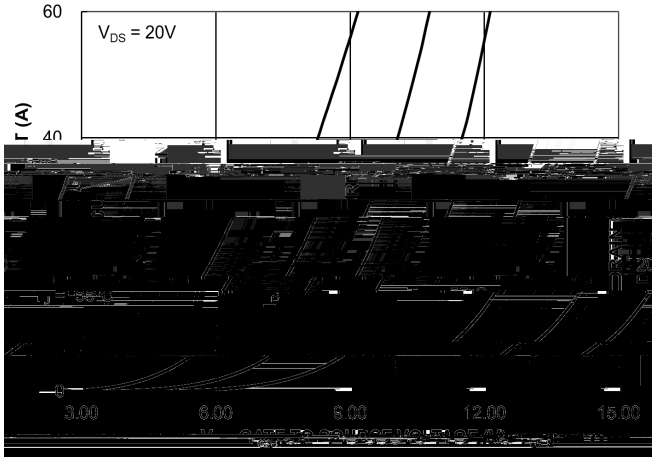

Figure 5. Transfer Characteristics

Figure 6. Diode Forward Voltage vs. Current

TYPICAL CHARACTERISTICS (continued)

D^{2}PAK7 (TO−263−7L HV)
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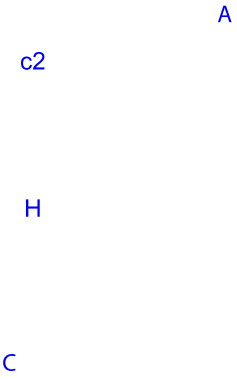

GENERIC
MARKING DIAGRAM*

XXXX = Specific Device Code
A = Assembly Location
Y = Year
WW = Work Week
G = Pb−Free Package

*This information is generic. Please refer to device data sheet for actual part marking. Pb−Free indicator, “G” or microdot “▪”, may or may not be present. Some products may not follow the Generic Marking.