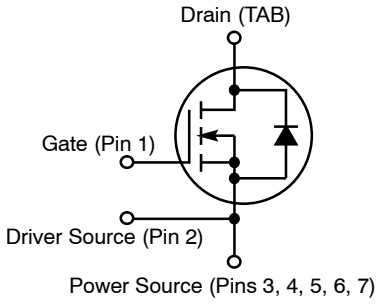
$V_{(BR)DSS}$	$R_{DS(ON)}$ MAX	I_D MAX
900 V	28 mΩ @ 15 V	112 A



D2PAK−7L
CASE 418BJ
N−CHANNEL MOSFET

MARKING DIAGRAM

A = Assembly Location
Y = Year
WW = Work Week
ZZ = Lot Traceability
NTBG020N090SC1 = Specific Device Code

		−55 to +175	°C
Source Current (Body Diode)	I_S	148	A
Single Pulse Drain−to−Source Avalanche Energy (I_L = 23 A_{pk}, L = 1 mH) (Note 4)	E_{AS}	264	mJ
Maximum Lead Temperature for Soldering, 1/8″ from Case for 10 Seconds	T_L	245	°C

Stresses exceeding those listed in the Maximum Ratings table may damage the device. If any of these limits are exceeded, device functionality should not be assumed, damage may occur and reliability may be affected.

1. Surface mounted on a FR−4 board using1 in^2 pad of 2 oz copper.
2. The entire application environment impacts the thermal resistance values shown, they are not constants and are only valid for the particular conditions noted.
3. Repetitive rating, limited by max junction temperature.
4. E_{AS} of 264 mJ is based on starting T_J = 25°C; L = 1 mH, I_{AS} = 23 A, V_{DD} = 100 V, V_{GS} = 15 V.

ORDERING INFORMATION

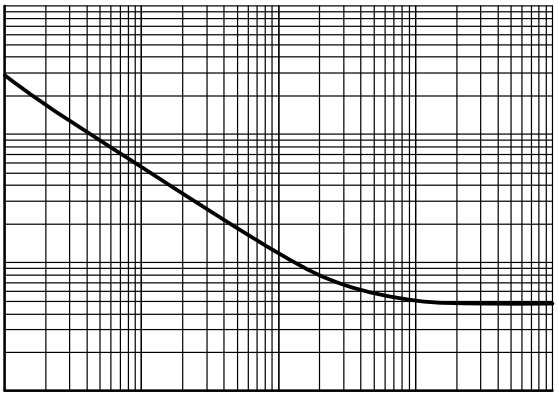
Device	Package	Shipping†
NTBG020N090SC1	D2PAK−7L	800 / Tape & Reel

†For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification Brochure, BRD8011/D.

Table 2. ELECTRICAL CHARACTERISTICS (T_J

NTBG020N090SC1

TYPICAL CHARACTERISTICS (continued)



TYPICAL CHARACTERISTICS (continued)

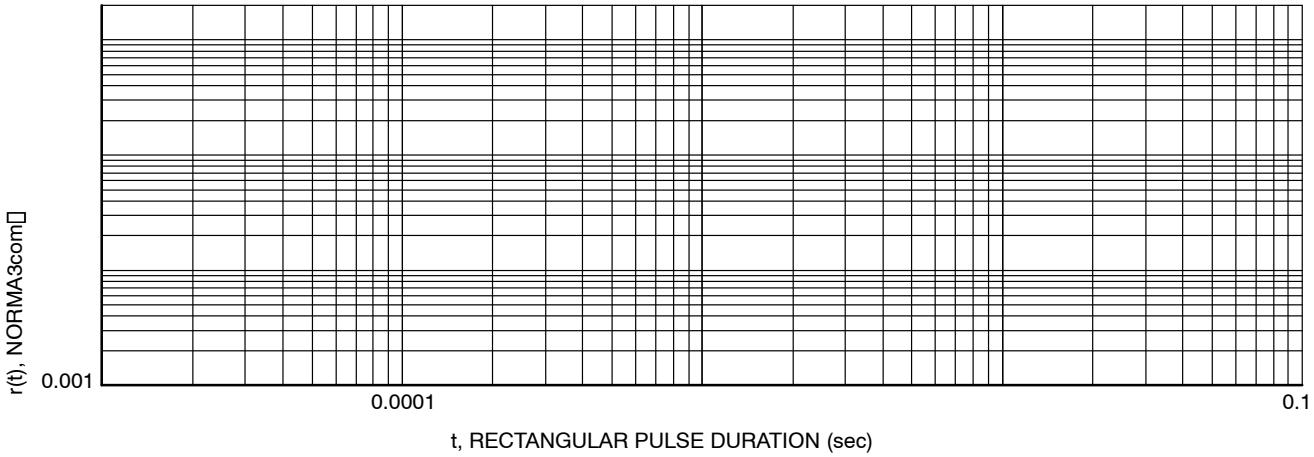
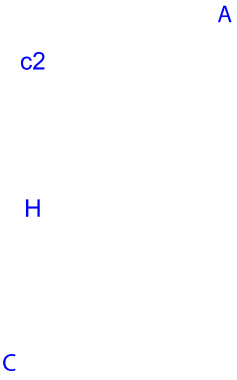


Figure 13. Junction−to−Ambient Transient Thermal Response Curve

D^{2}PAK7 (TO−263−7L HV)
CASE 418BJ
ISSUE B

DATE 16 AUG 2019



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.