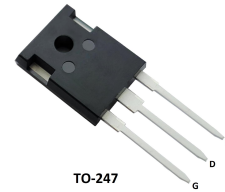


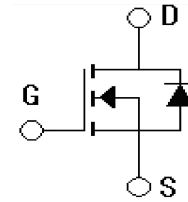
Features

- $V_{DS}=200V, I_D=200A$
 $R_{DS(on)}=10m\Omega$
- High density cell design for ultra low $R_{DS(on)}$
- 100% avalanche tested
- Low gate charge



Applications

- High Efficiency Synchronous Rectification in SMPS
- Uninterruptible Power Supply
- High Speed Power Switching
- Hard Switched And High Frequency Circuits



Absolute Ratings ($T_c=25^\circ C$)

Parameter	Symbol	Limit	Unit
Drain-Source Voltage	V_{DSS}	200	V
Gate-Source Voltage	V_{GSS}	± 30	V
Drain Current-continuous	I_D	200	A
Drain Current-pulse	I_{DM}	800	A
Single Pulsed Avalanche Energy	E_{AS}	750	mJ
Maximum Power Dissipation	PD $T_C=25^\circ C$ Derate above $25^\circ C$	350	W
Operating Temperature Range	T_J	$-55\sim+175$	$^\circ C$
Storage Temperature Range	T_{STG}	$-55\sim+150$	$^\circ C$

Electrical Characteristics($T_{CASE}=25^\circ C$ unless otherwise specified)

Parameter	Symbol	Tests conditions	Min	Typ	Max	Units
Drain-Source Voltage	BV_{DSS}	$I_D=250\mu A, V_{GS}=0V$	200	-	-	V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS}=V_{DSS}, V_{GS}=0V$	-	-	25	μA
Gate-Body Leakage Current	I_{GSS}	$V_{GS}=\pm 30V, V_{DS}=0V$	-	-	± 100	nA

On-Characteristics						
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS}=V_{GS}, I_D=250\mu A$	2.5	-	5	V
Static Drain-Source On-Resistance	$R_{DS(ON)}$	$V_{GS}=10V, I_D=100A$	-	10	-	m Ω
Forward Transconductance	g_{fs}	$V_{DS}=50V, I_D=100A(1)$	150	-	-	S
Gate Input Resistance	R_g		-	1	-	Ω
Dynamic Characteristics						
Input capacitance	C_{iss}	$V_{DS}=25V, V_{GS}=0V, f=1.0MHz$	-	10.5	-	nF
Output capacitance	C_{oss}		-	760	-	pF
Reverse transfer capacitance	C_{rss}		-	150	-	pF

Electrical Characteristics($T_{CASE}=25^{\circ}C$ unless otherwise specified)

Parameter	Symbol	Tests conditions	Min	Typ	Max	Units
Switching-Characteristics						
Turn-On delay time	t _{d(on)}	V _{DS} =100V,I _D =100A, V _{GS} =10V,Rg=2.7Ω	-	41	-	ns
Turn-On rise time	t _r		-	105	-	ns
Turn-Off delay time	t _{d(Off)}		-	64	-	ns
Turn-Off rise time	t _f		-	74	-	ns
Total Gate Charge	Q _g	V _{DS} =100V,I _D =100A, V _{GS} =10V	-	150	-	nC
Gate-Source charge	Q _{gs}		-	52	-	nC
Gate-Drain charge	Q _{gd}		-	51	-	nC
Drain-Source Diode Characteristics and Maximum Ratings						
Maximum Continuous Drain-Source Diode Forward Curret	V _{SD}	V _{GS} =0V,I _S =100A(1)	-	-	1.2	V
Diode Forward Current	I _S	TC=25℃	-	-	200	A
Reverse recovery time	T _{rr}	I _S =100A, dI/dT=100A/μS VR=100V,VGS=0V	-	125	-	nS
Reverse recovery charge	Q _{rr}		-	620	-	μC
Reverse recovery Current	I _{rm}		-	8.7	-	A

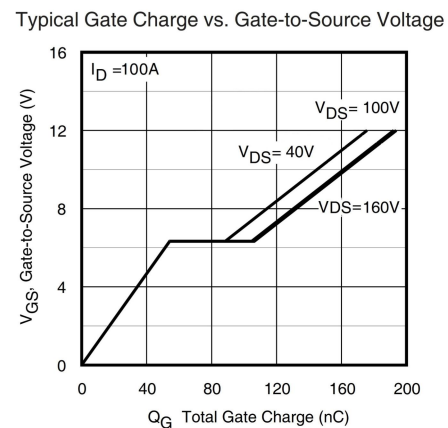
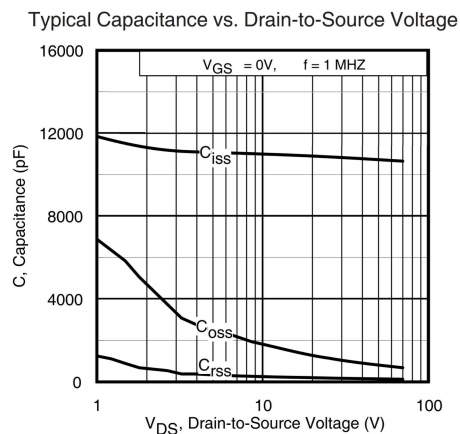
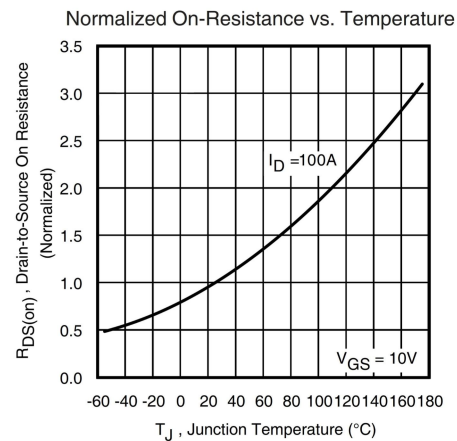
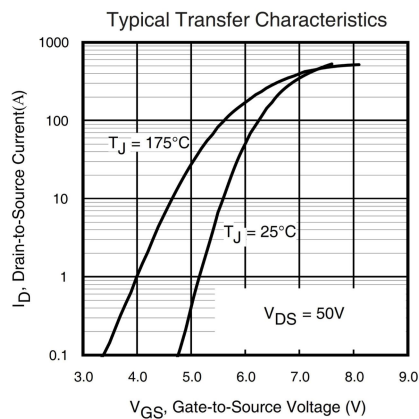
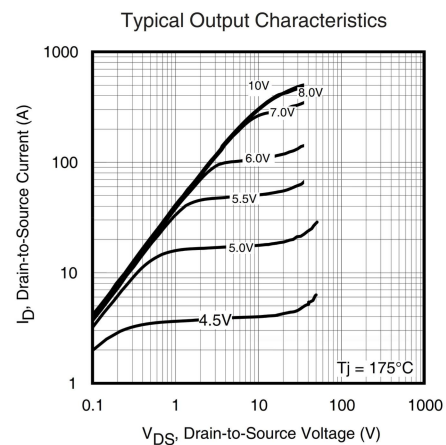
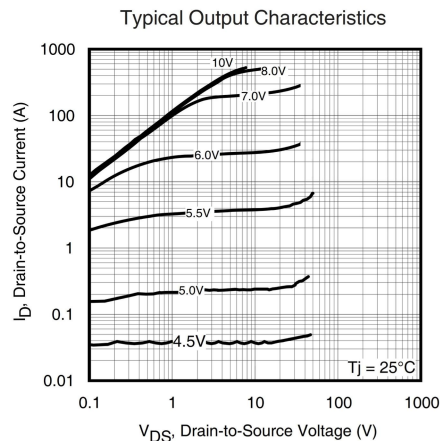
Thermal Characteristic

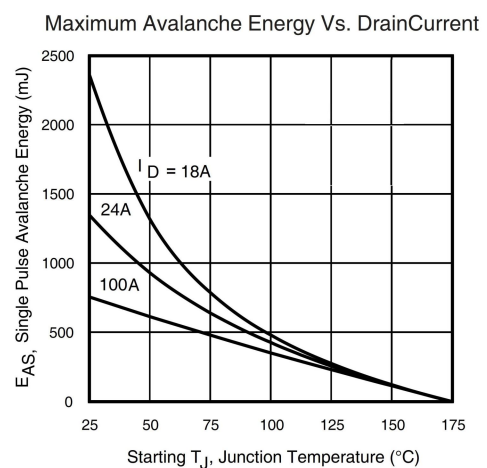
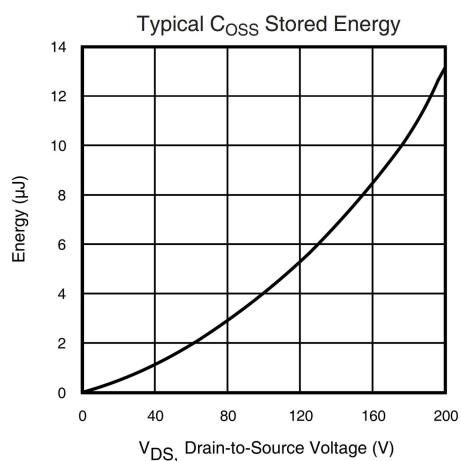
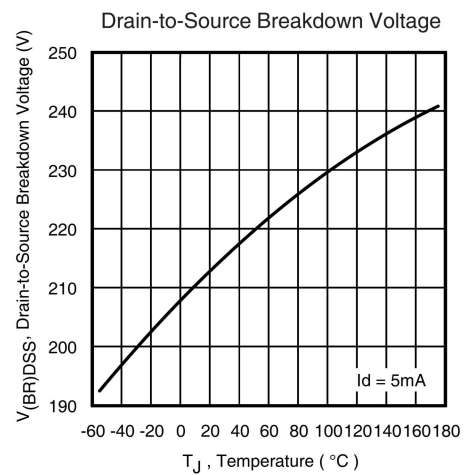
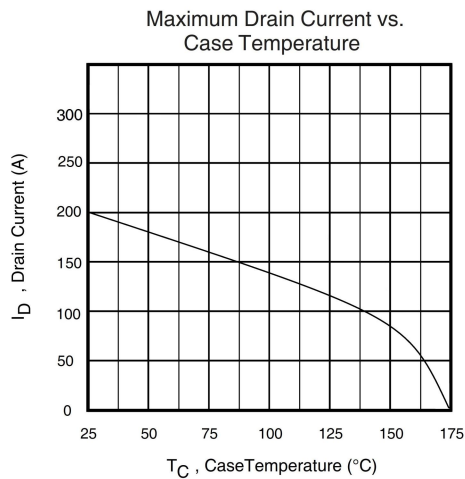
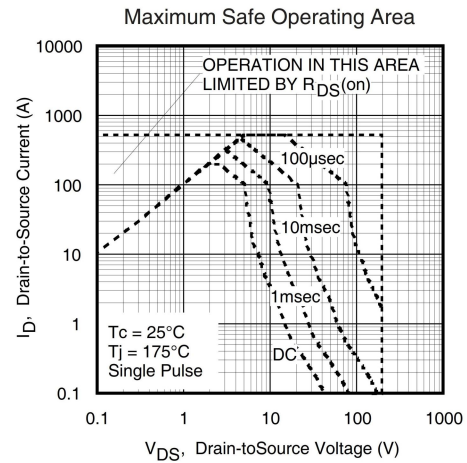
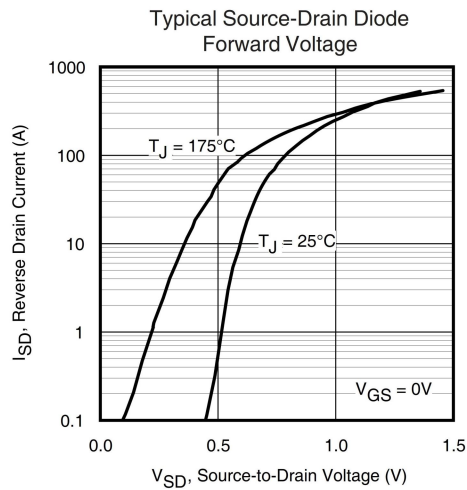
Parameter	Symbol	Value	Unit
Thermal Resistance,junction to Case	$R_{th(j-C)}$	0.43	$^{\circ}\text{C}/\text{W}$
Thermal Resistance,junction to Ambient	$R_{th(j-A)}$	40	$^{\circ}\text{C}/\text{W}$

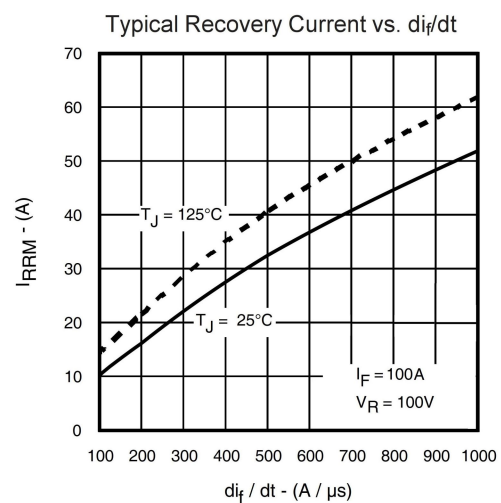
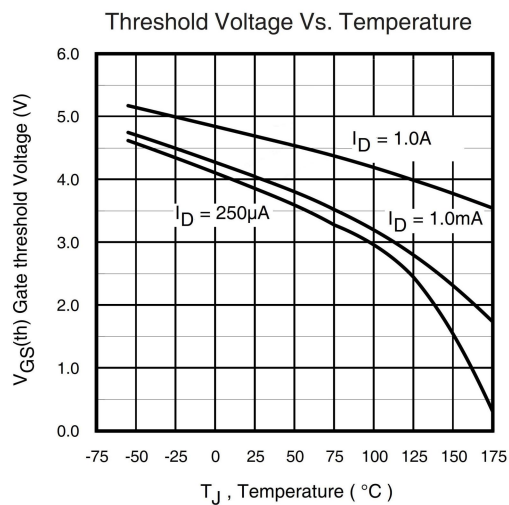
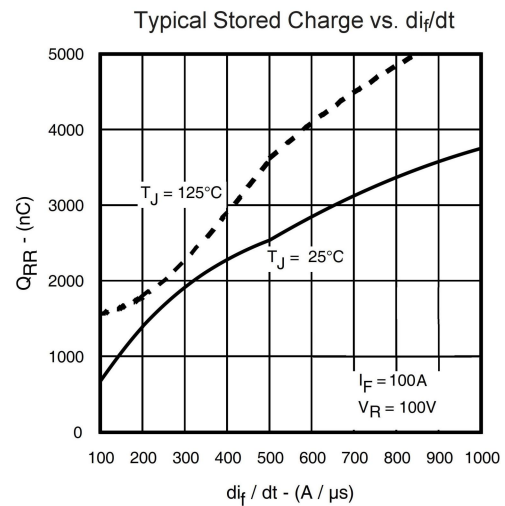
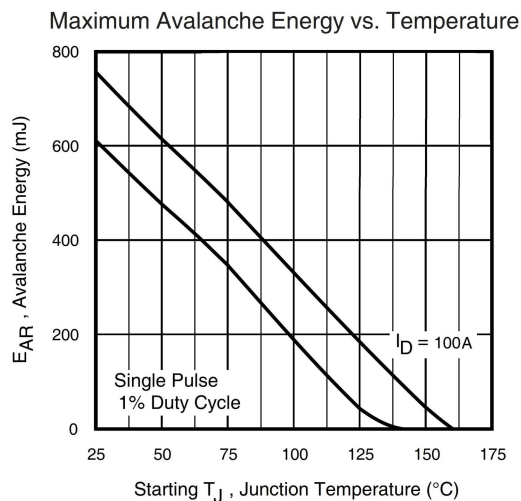
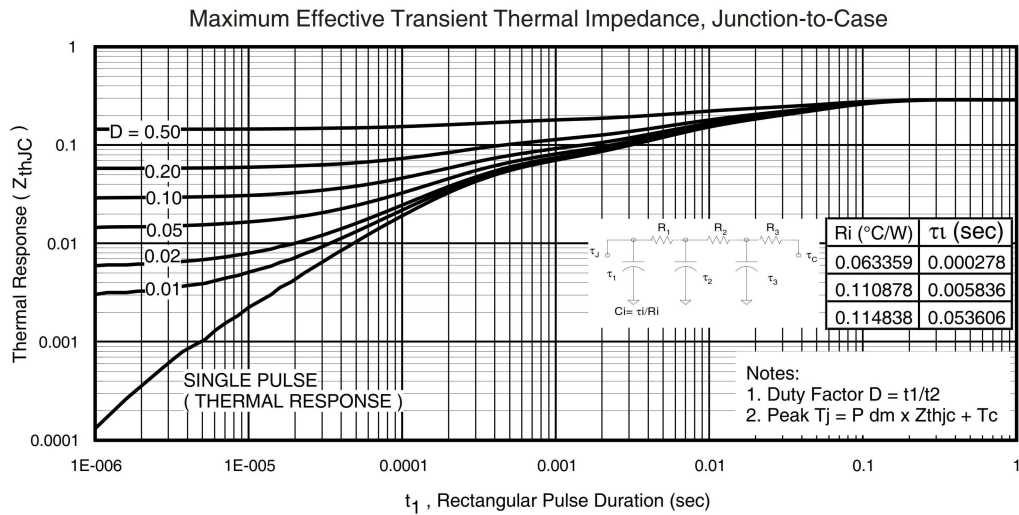
Notes:

1. Pulse Test: Pulse Width $\leq 300\mu\text{s}$, Duty Cycle $\leq 2\%$

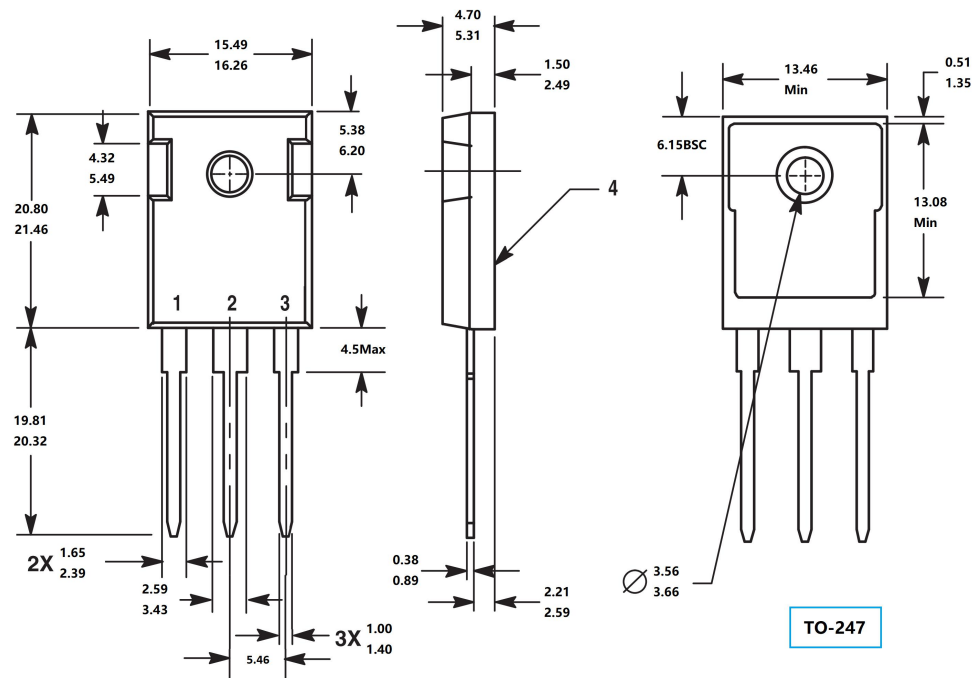
Electrical Characteristics







Package Mechanical DATA



X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [MOSFETs](#) category:

Click to view products by [MASPOWER](#) manufacturer:

Other Similar products are found below :

[MCH3443-TL-E](#) [MCH6422-TL-E](#) [NTNS3A92PZT5G](#) [IRFD120](#) [2SK2464-TL-E](#) [2SK3818-DL-E](#) [2SJ277-DL-E](#) [2SK2267\(Q\)](#) [MIC4420CM-TR](#) [IRFS350](#) [IPS70R2K0CEAKMA1](#) [AON6932A](#) [2SK2614\(Te16L1,Q\)](#) [DMN1017UCP3-7](#) [EFC2J004NUZTDG](#) [SCM040600](#) [NTE2384](#) [2N7000TA](#) [DMN2080UCB4-7](#) [US6M2GTR](#) [DMN31D5UDJ-7](#) [DMP22D4UFO-7B](#) [DMN1006UCA6-7](#) [DMN16M9UCA6-7](#) [STF5N65M6](#) [IRF40H233XTMA1](#) [STU5N65M6](#) [DMN13M9UCA6-7](#) [STU7N60DM2](#) [DMTH10H4M6SPS-13](#) [DMN2990UFB-7B](#) [2N7002W-G](#) [MCQ7328-TP](#) [IPB45P03P4L11ATMA2](#) [BXP4N65F](#) [BXP2N20L](#) [BXP2N65D](#) [TSM60NB380CP](#) [ROG](#) [SLF10N65ABV2](#) [IRF9395MTRPBF](#) [FCMT080N65S3](#) [NTD5C632NLT4G](#) [NTMFS0D55N03CGT1G](#) [NTMFS1D15N03CGT1G](#) [NTMTS0D4N04CTXG](#) [NTMYS2D1N04CLTWG](#) [NVD360N65S3T4G](#) [NVD5C464NLT4G](#) [NVMTS001N06CLTXG](#) [NVMTS1D1N04CTXG](#)