HGD480N15M , HGI480N15M

150V N-Ch Power MOSFET

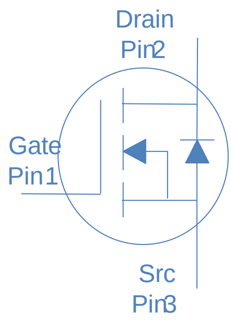
Feature

- High Speed Power Smoo Switching,Logic Level
- Enhanced Body diode dv/dt capability
- Enhanced Avalanche Ruggedness
- 100% UIS Tested, 100% Rg Tested
- Lead Free

V_{DS}		150	V
$R_{DS(on),typ}$	V_{GS}=10V	41	m :
I_D		28	A

Application

- Synchronous Rectification in SMPS



Part Number	Package	Marking
HGD480N15M	TO-252	GD480N15M
HGI480N15M	TO-251	GI480N15M

Absolute Maximum Ratings at T_j=25 (unless otherwise specified)

Parameter	Symbol	Conditions	Value	Unit
Continuous Drain Current	I_D	T_C=25	27.9	A
		T_C=100	19.7	
Drain to Source Voltage	V_{DS}	-	150	V
Gate to Source Voltage	V_{GS}	-	±20	V
Pulsed Drain Current	I_{DM}	-	45	A
Avalanche Energy, Single Pulse	E_{AS}	L=0.4mH, T_C=25	20	mJ
Power Dissipation	P_D	T_C=25	83	W
Operating and Storage Temperature	T_J, T_{stg}	-	-55 to175	

Absolute Maximum Ratings

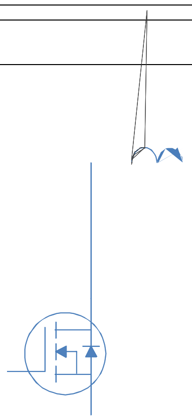
Parameter	Symbol	Max	Unit
Thermal Resistance Junction-Case	R a - &	1.8	/W
Thermal Resistance Junction-Ambient	R a - $	65	/W

Drain to Source on Resistance				41
		V_{DS}=5V, I_D=10A	-	
			-	
Total Gate Charge	Q_g (10V)			
Turn on Delay Time	$t_{d(on)}$			
Rise time	t_r			
	$t_{d(off)}$			
				3
			-	0.9
	t_{rr}	V_R=75V, I_F=10A, dI_F/dt=100A/µs	-	

Inductive switching Test

Gate Charge Test

Uclamped Inductive Switching (UIS) Test



Diode Recovery Test

TO-251, 3 leads

TO-252, 2 leads