HGB105N15M，HGK105N15M
HGP105N15M

150V N-C

Feature

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

V_{DS}	
$R_{DS(on),typ}$	
$R_{DS(on),typ}$	
$R_{DS(on),typ}$	
$I_{D\ (Sillicon\ Lim}$	

Application

- Synchronous Rectification in SMPS
- Hard Switching and High Speed Circuit
- Power Tools
- UPS
- Motor Control

TO-263

TO-220

TO-247

Src
Pin3

Part Number	Package	Marking
HGB105N15M	TO-263	GB105N15M
HGK105N15M	TO-247	GK105N15M
HGP105N15M	TO-220	GP105N15M

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

Parameter	Symbol	Conditions	Value	Unit
Continuous Drain Current (Silicon Limited)	I_D	T_C=25	120	A
		T_C=100	85	
Drain to Source Voltage	V_{DS}	-	150	V
Gate to Source Voltage	V_{GS}	-	±20	V
Pulsed Drain Current	I_{DM}	-	400	A
Avalanche Energy, Single Pulse	E_{AS}	L=0.4mH, T_C=25	845	mJ
Power Dissipation	P_D	T_C=25	333	W
Operating and Storage Temperature	T_J, T_{stg}	-	-55 to175	

Absolute Maximum Ratings

Parameter	Symbol	Max	Unit
Thermal Resistance Junction-Case	$R_{\Theta JC}$	0.45	/W
Thermal Resistance Junction-Ambient	$R_{\Theta JA}$	60	/W

Figure 7. Typical Gate-Charge vs. Gate-to-Source Voltage

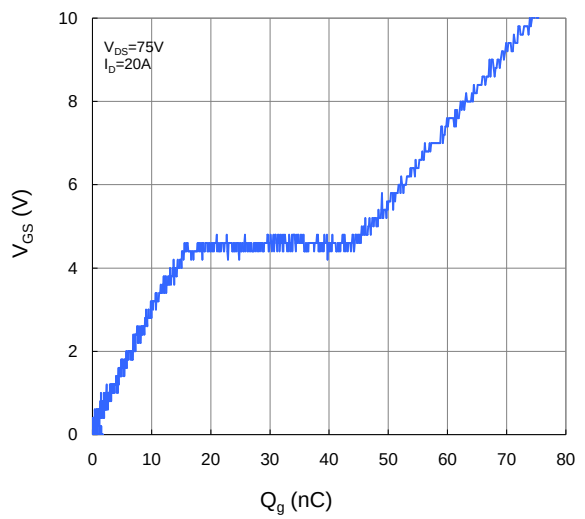

Figure 8. Typical Capacitance vs. Drain-to-Source Voltage

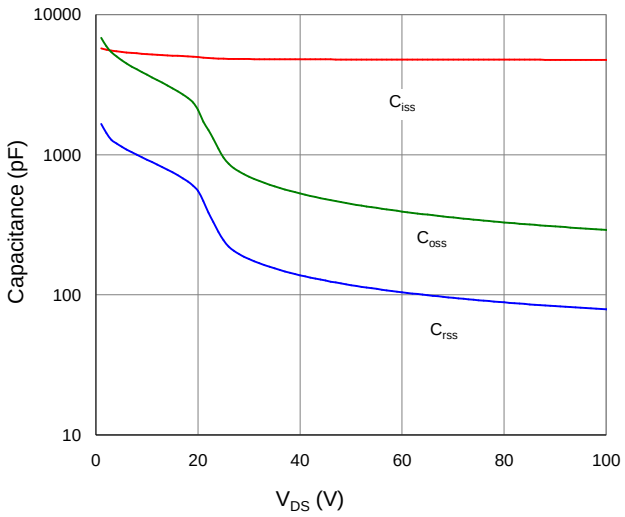

Figure 9. Maximum Safe Operating Area

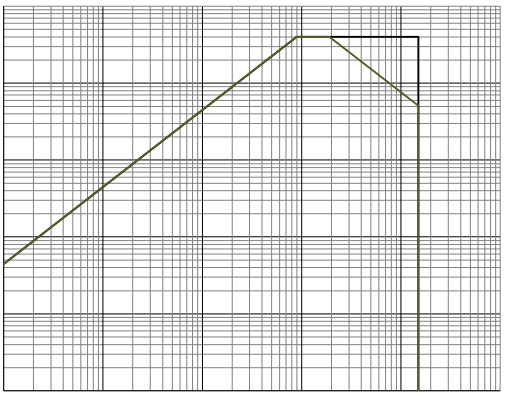

Figure 10. Maximun Drain Current vs. Case Temperature

Figure 11. Normalized Maximum Transient Thermal Impedance, Junction-to-Case

TO-247, 3 leads