GSM6320XF

Preliminary Specification

60V N-Channel MOSFET

Absolute Maximum Ratings (T_A=25ºC unless otherwise specified)

Symbol	Parameter		Value	Unit
V_{DS}	Drain-Source Voltage		60	V
V_{GS}	Gate-Source Voltage		±20	V
I_D	Continuous Drain Current (Silicon Limited)	T_C=25ºC	168	A
		T_C=100ºC	106	
	Continuous Drain Current (Package Limited)		100	
I_{DM}	Pulsed Drain Current [1]		400	A
P_D	Power Dissipation	T_C=25ºC	125	W
		T_C=100ºC	50	
$R_{\theta JC}$	Thermal Resistance-Junction to Case		1	℃/W
$R_{\theta JA}$	Thermal Resistance-Junction to Ambient		62	ºC/W
T_J	Operating Junction Temperature Range		-55 to +150	℃
T_{STG}	Storage Temperature Range		-55 to +150	℃

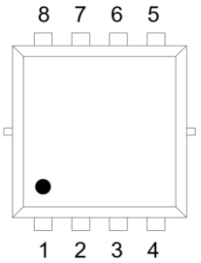
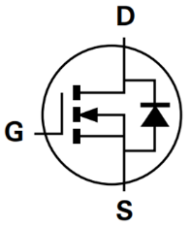
NOTE :

1. Pulse width limited by maximum junction temperature.

Electrical Characteristics (T_A=25℃ unless otherwise specified)

Symbol	Parameter	Conditions	Min	Typ	Max	Unit
Static						
$V_{(BR)DSS}$	Drain-Source Breakdown Voltage	V_{GS}=0V, I_D=250uA	60			V
I_{DSS}	Drain-Source Leakage Current	V_{DS}=60V, V_{GS}=0V			1	uA
I_{GSS}	Gate-Source Leakage Current	V_{DS}=0V, V_{GS}=±20V			±100	nA
$V_{GS(th)}$	Gate Threshold Voltage	V_{DS}=V_{GS}, I_D=250uA	1.2		2.5	V
$R_{DS(on)}$	Drain-Source On-Resistance	V_{GS} =10V, I_D=20A			2.1	mΩ
		V_{GS} =4.5V, I_D=10A			3.2	
V_{SD}	Diode Forward Voltage	V_{GS}=0V, I_S=1A			1.0	V

Packages & Pin Assignments

DFN5X6-8L	Equivalent Circuit
	

Pin	Symbol	Description	Pin	Symbol	Description
1	S	Source	8	D	Drain
2	S	Source	7	D	Drain
3	S	Source	6	D	Drain
4	G	Gate	5	D	Drain

NOTICE

- Globaltech Semiconductor assumes no responsibility for equipment failures that result from using products at values that exceed, even momentarily, rated values (such as maximum ratings, operating condition ranges, or other parameters) listed in products specifications of any and all Globaltech Semiconductor products described or contained herein. Globaltech Semiconductor products are not designed for use in life support appliances, devices or systems where malfunction of these products can be reasonably expected to result in personal injury. Reproduction in whole or in part is prohibited without the prior written consent of the copyright owner.

- Applications shown on the herein document are examples of standard use and operation. Customers are responsible in comprehending the suitable use in particular applications. Globaltech Semiconductor makes no representation or warranty that such applications will be suitable for the specified use without further testing or modification.

- Information furnished is believed to be accurate and reliable. However Globaltech Semiconductor assumes no responsibility for the consequences of use of such information nor for any infringement of patents or other rights of third parties, which may result from its use. No license is granted by implication or otherwise under any patent or patent rights of Globaltech Semiconductor. Specifications mentioned in this publication are subject to change without notice. This publication supersedes and replaces all information without express written approval of Globaltech Semiconductor.

CONTACT US

GS Headquarter	
	4F, NO.43-1, Lane 11, Sec. 6, Minquan E. Rd Neihu District, Taipei City 114761, Taiwan (R.O.C).
	886-2-2657-9980
	886-2-2657-3630
	sales_twn@gs-power.com

RD Division	
	824 Bolton Drive Milpitas. CA. 95035
	1-408-457-0587