

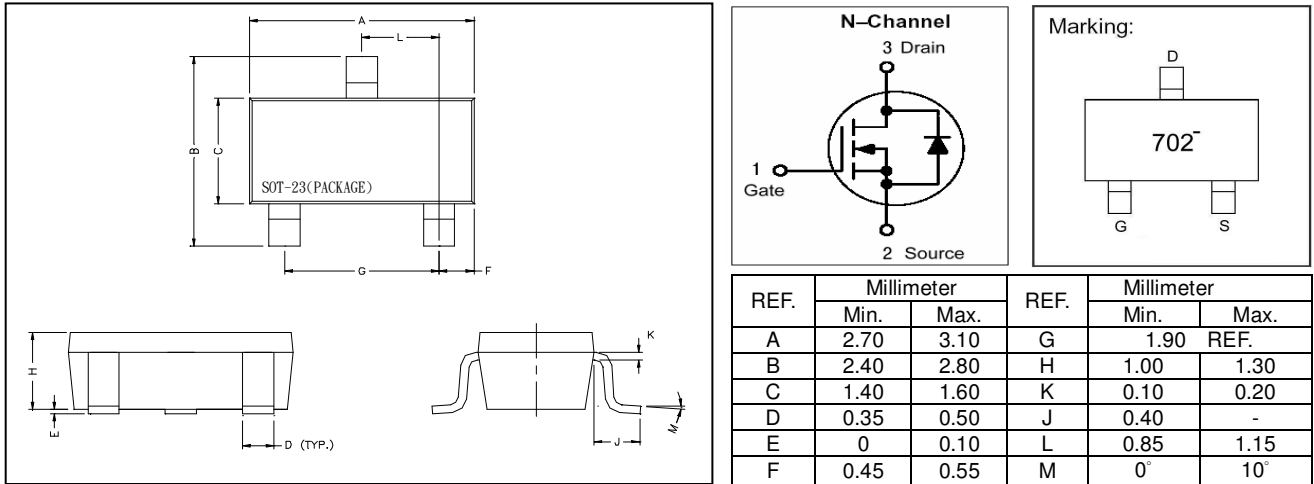
G2N7002

N-CHANNEL TRANSISTOR

Description

N-channel enhancement-mode MOS TRANSISTOR

Package Dimensions



Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	Ratings	Unit
Operating Junction and Storage Temperature Range	Tj, Tstg	-55 ~ +150	°C
Drain-Source Voltage		60	V
Gate-Source Voltage	VGS	±20	V
- Continuous			
- Non-repetitive (tp≤50us)	VGSM	±40	V
Continuous Drain Current	ID	115	mA
		73	
Pulsed Drain Current (Ta=25°C)	IDM	800	mA
Power Dissipation	PD	0.2	W
		0.08	
Thermal Resistance ,Junction-to-Ambient	RthJA	625	°C/W

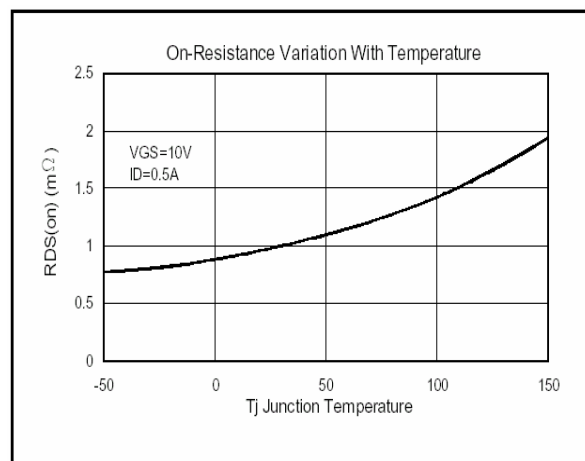
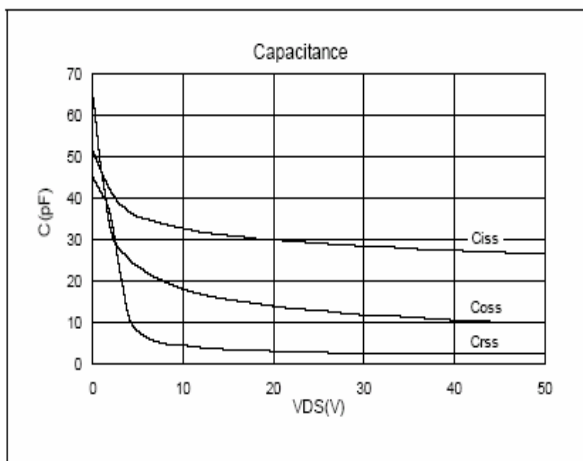
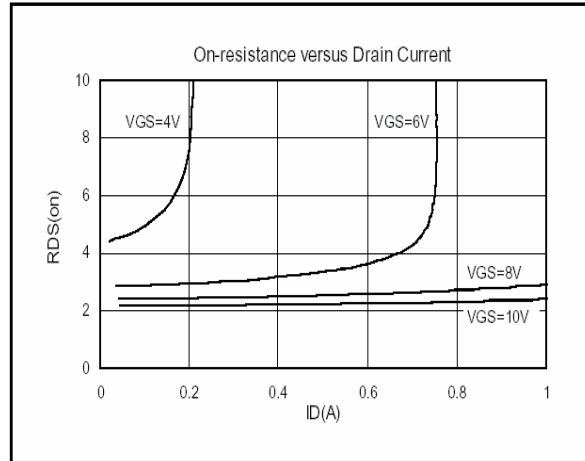
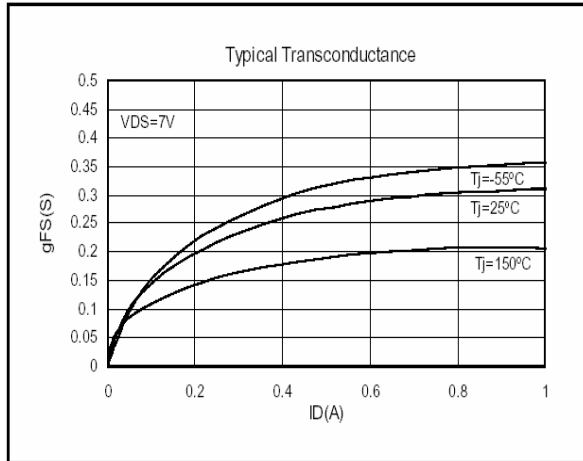
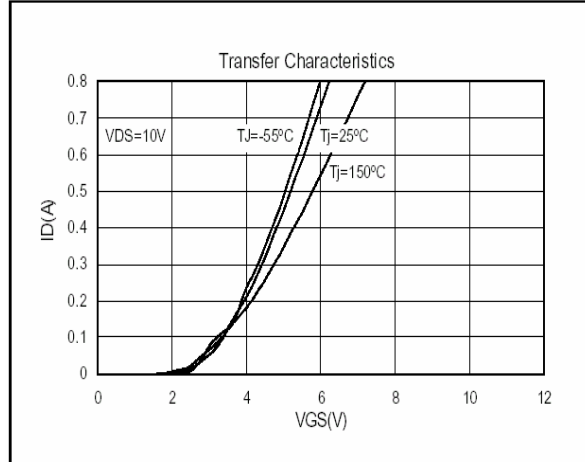
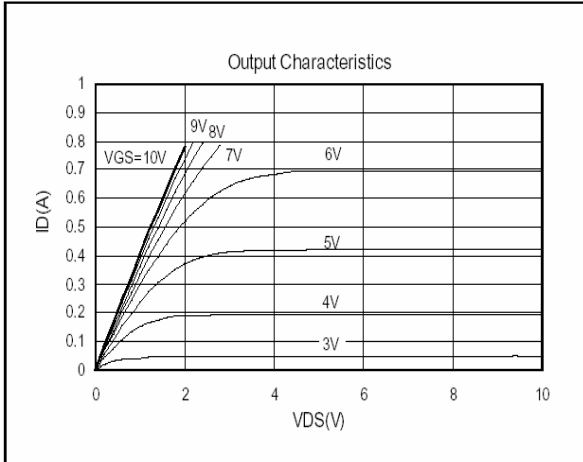
Characteristics at Ta = 25°C

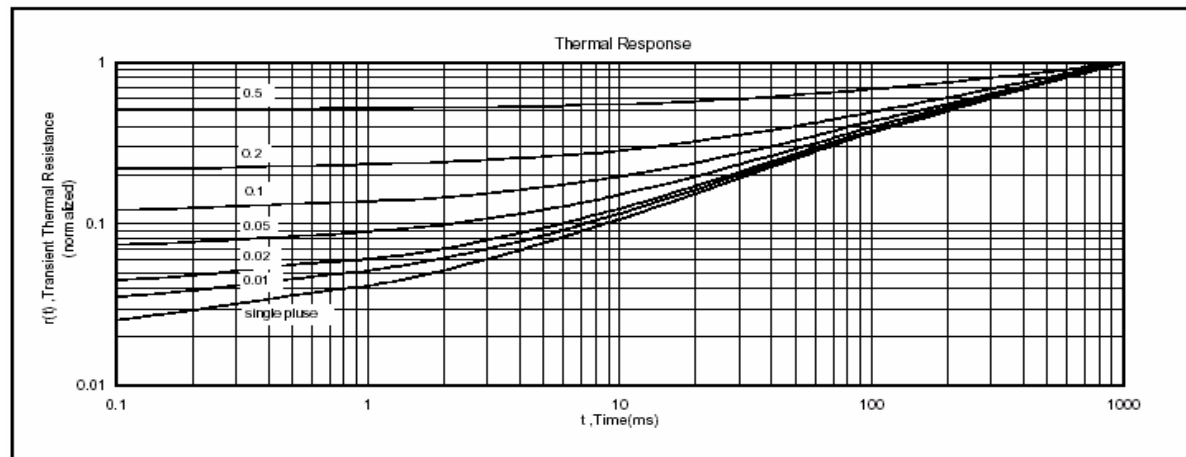
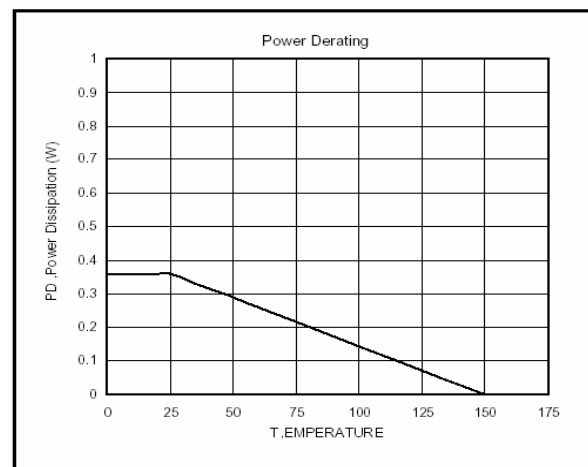
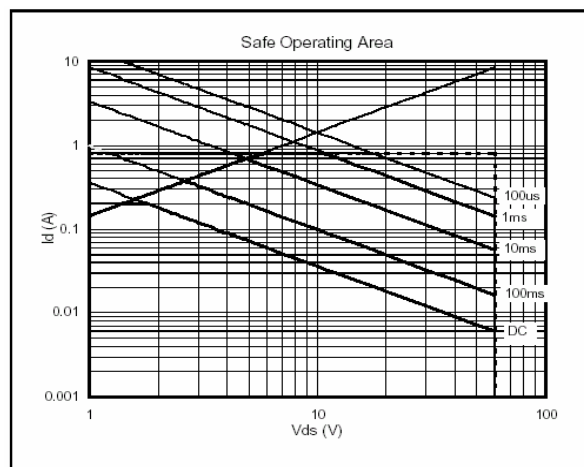
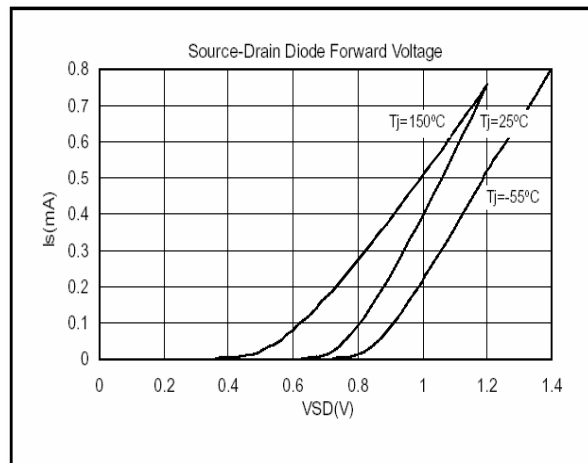
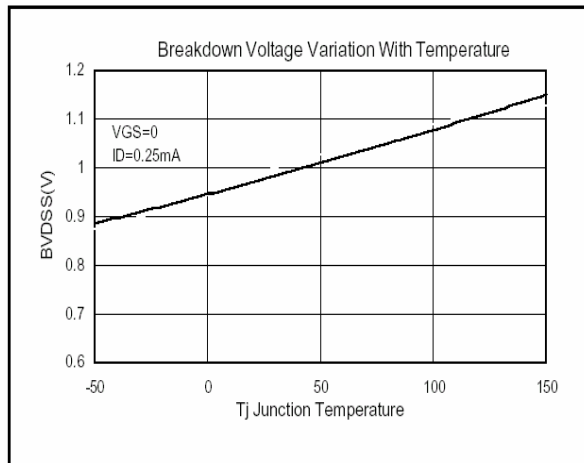
Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions	
Drain-Source Breakdown Voltage	BV _{DSS}	60	-	-	V	V _{GS} =0, I _D =10uA	
Gate Threshold Voltage	V _{GS(th)}	1	-	2.5	V	V _{DS} =2.5V, I _D =0.25mA	
Gate Body Leakage Current	I _{GSS}	-	-	±100	nA	V _{GS} =±20V, V _{DS} =0	
Zero Gate Voltage Drain Current	I _{dss}	-	-	1	uA	V _{DS} =60V, V _{GS} =0	
On-State Drain Current	I _{D(ON)}	500	-	-	mA	V _{DS} =7.5V ,VGS=10V	
Static Drain-Source on-State Resistance	R _{DS(ON)}	-	-	7.5	Ω	I _d =50mA, V _{GS} =5V	25℃
		-	-	13.5			125℃
		-	-	7.5		I _d =500mA, V _{GS} =10V	25℃
		-	-	13.5			125℃
Forward Transconductance	G _{FS}	80	-	-	mS	V _{DS} >2 V _{DS(ON)} , I _D =200mA	
Input Capacitance	C _{iss}	-	-	50	pF	V _{DS} =25V, V _{GS} =0V, f=1MHz	
Output Capacitance	C _{oss}	-	-	25	pF		
Reverse Transfer Capacitance	C _{rss}	-	-	5	pF		

(1)The Power Dissipation of the package may result in a continuous train current.

(2)Pulse Width $\leq 300\mu s$, Duty cycle $\leq 2\%$.

Characteristics Curve





Important Notice:

- All rights are reserved. Reproduction in whole or in part is prohibited without the prior written approval of GTM.
- GTM reserves the right to make changes to its products without notice.
- GTM semiconductor products are not warranted to be suitable for use in life-support Applications, or systems.
- GTM assumes no liability for any consequence of customer product design, infringement of patents, or application assistance.

Head Office And Factory:

- Taiwan:** No. 17-1 Tatung Rd. Fu Kou Hsin-Chu Industrial Park, Hsin-Chu, Taiwan, R. O. C.
TEL : 886-3-597-7061 FAX : 886-3-597-9220, 597-0785
- China:** (201203) No.255, Jang-Jiang Tsai-Lueng RD. , Pu-Dung-Hsin District, Shang-Hai City, China
TEL : 86-21-5895-7671 ~ 4 FAX : 86-21-38950165