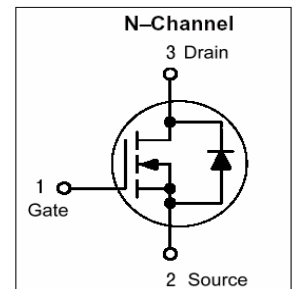
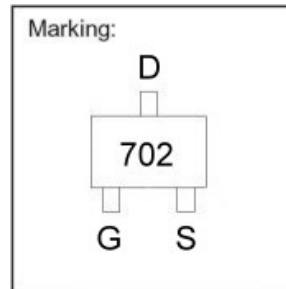
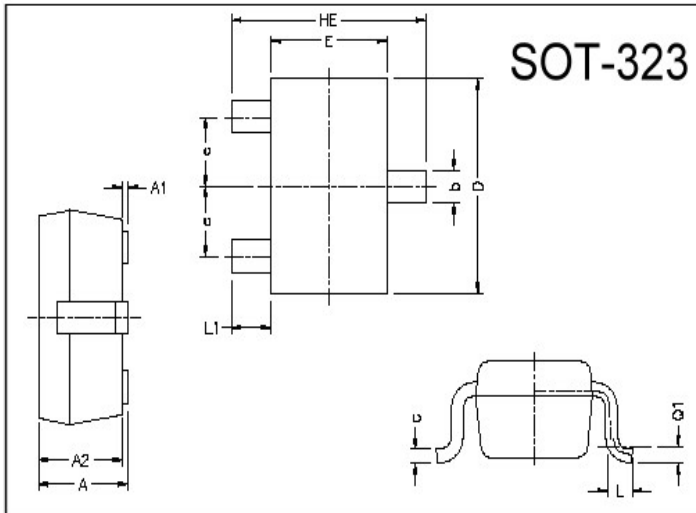


GS2N7002**N-CHANNEL ENHANCEMENT MODE POWER MOSFET**

BV _{DSS}	60V
R _{DS(ON)}	4.5Ω
I _D	500mA

Description

The GS2N7002 is universally used for all commercial-industrial surface mount applications.

Package Dimensions

REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	0.8	1.10	L1	0.42	REF.
A1	0	0.10	L	0.15	0.35
A2	0.8	1.00	b	0.25	0.40
D	1.80	2.20	c	0.10	0.25
E	1.15	1.35	e	0.65	REF.
HE	1.80	2.40	Q1	0.15	BSC.

Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	Ratings	Unit
Operating Junction and Storage Temperature Range	T _j , T _{stg}	-55 ~ +150	°C
Drain-Source Voltage	V _{DS}	60	V
Gate-Source Voltage	V _{GS}	±20	V
- Continuous	V _{GSM}	±40	V
- Non-repetitive (t _p ≤ 50μs)			
Continuous Drain Current ⁽¹⁾	I _D	500	mA
Pulsed Drain Current ⁽²⁾	I _{DM}	800	mA
Power Dissipation	P _D	225	mW
Thermal Resistance, Junction-to-Ambient	R _{thJA}	556	°C/W

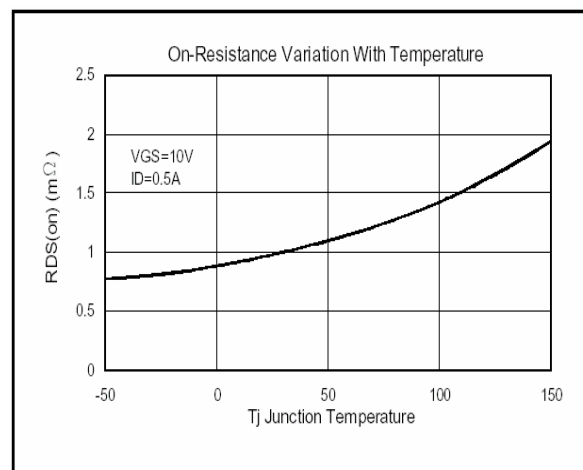
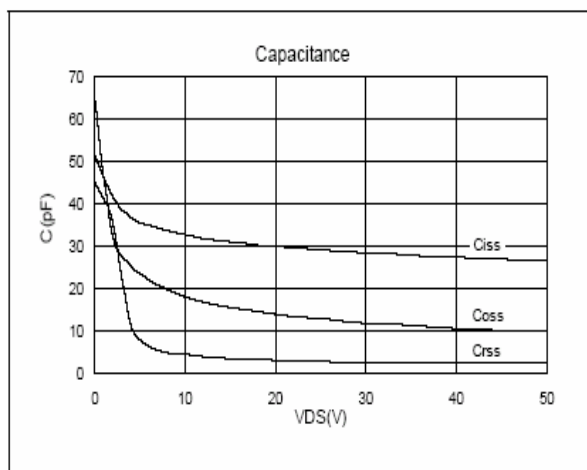
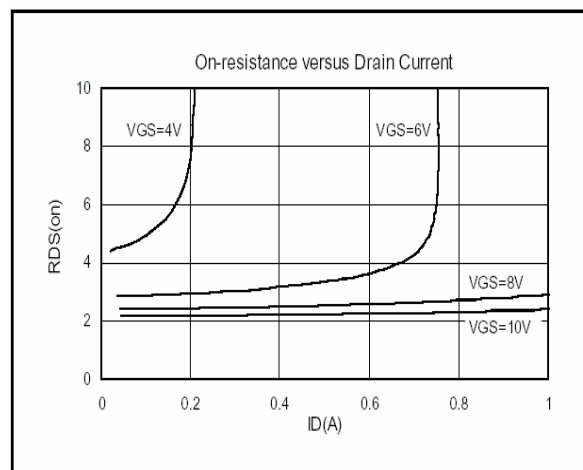
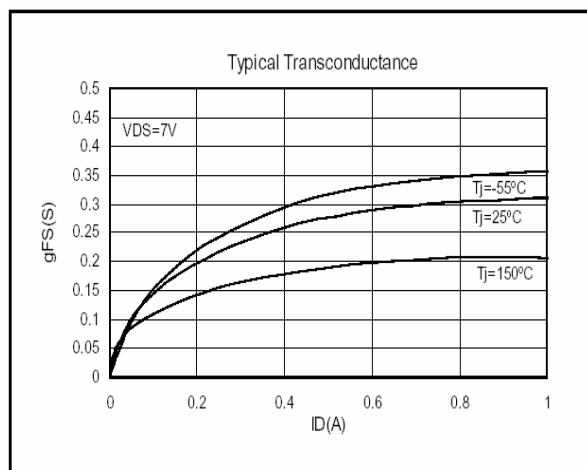
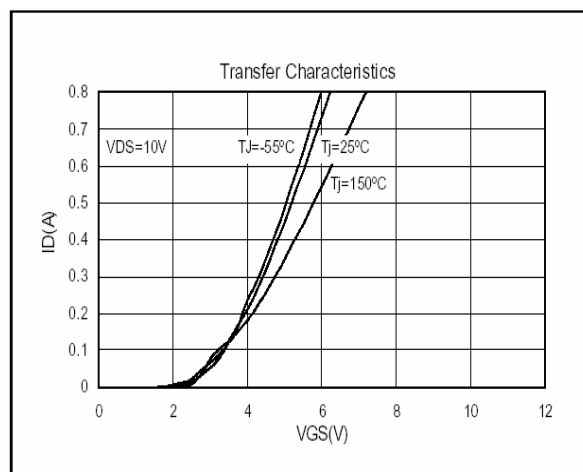
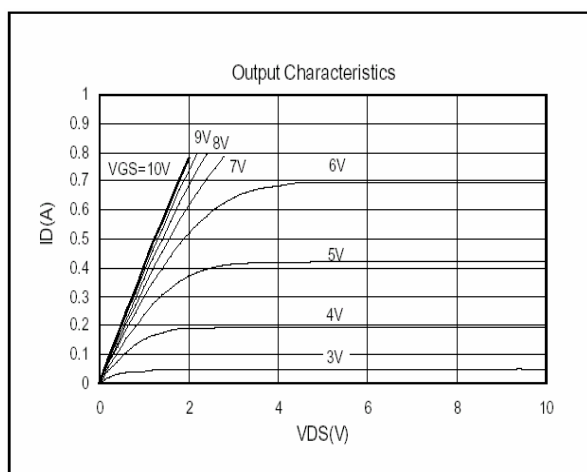
Electrical Characteristics (T_j = 25°C unless otherwise specified)

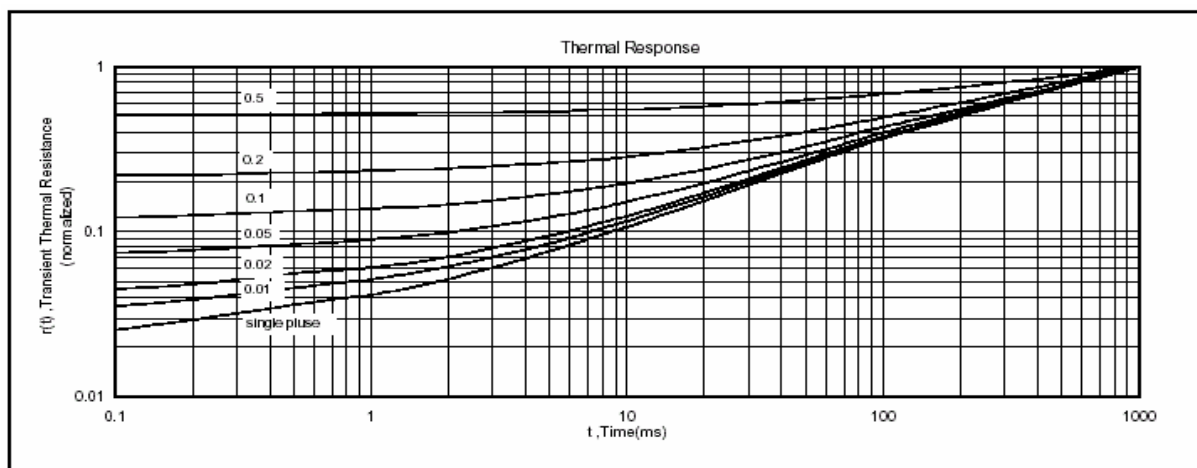
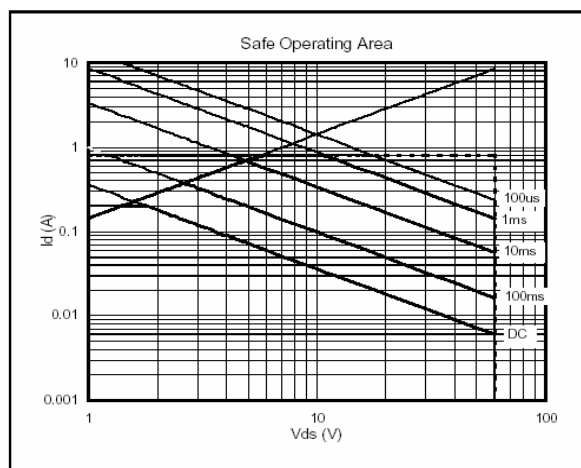
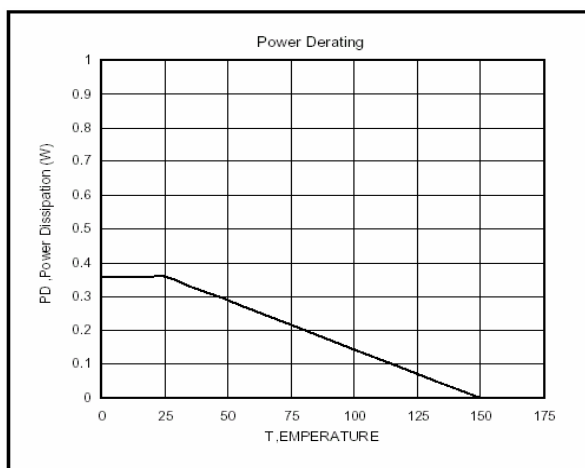
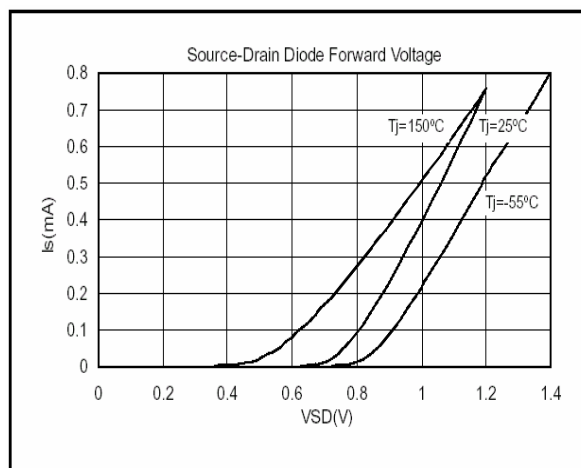
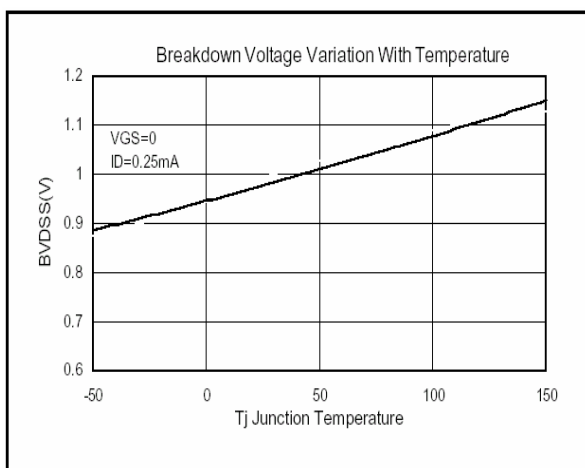
Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Drain-Source Breakdown Voltage	BV _{DSS}	60	-	-	V	V _{GS} =0, I _D =250μA
Gate Threshold Voltage	V _{GS(th)}	1	-	2.5	V	V _{DS} =2.5V, I _D =0.25mA
Gate Body Leakage Current	I _{GSS}	-	-	±100	nA	V _{GS} =±20V, V _{DS} =0
Zero Gate Voltage Drain Current	I _{DSS}	-	-	1	μA	V _{DS} =60V, V _{GS} =0
On-State Drain Current	I _{D(ON)}	500	-	-	mA	V _{DS} =7.5V, V _{GS} =10V
Static Drain-Source on-State Resistance	R _{DS(ON)}	-	-	5	Ω	I _D =50mA, V _{GS} =5V
		-	-	4.5		I _D =500mA, V _{GS} =10V
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 ≤ 300μs, Duty cycle ≤ 2%.

Characteristics Curve





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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