

Rev.I May.-2022

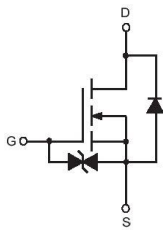


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SOT-23: ; ; < N = > MOS ? @ A B C N-CHANNEL MOSFET in a SOT-23 Plastic Package.

DEIF! GHI JKLMN I OPJKCQJ RST 2KVC O 1 6 7 C
Sensitive gate trigger current and Low Holding current.ESD protected up to 2KV. HF product.

UVWX I Y Z L [\ F ! C
Intenl for use in general purpose switching and phase control applications



PIN1] G PIN 2] S PIN 3] D

Marking	H702K
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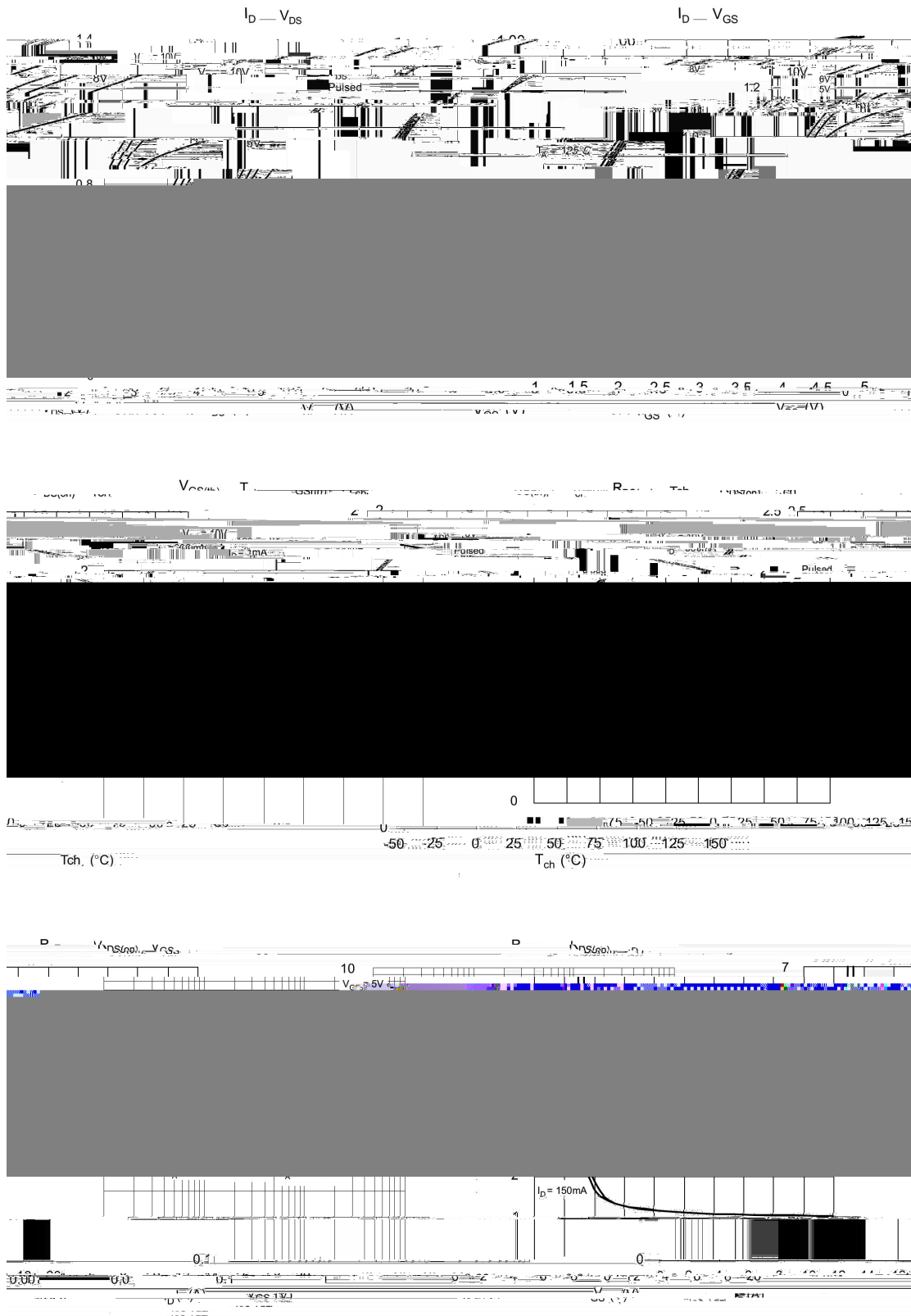
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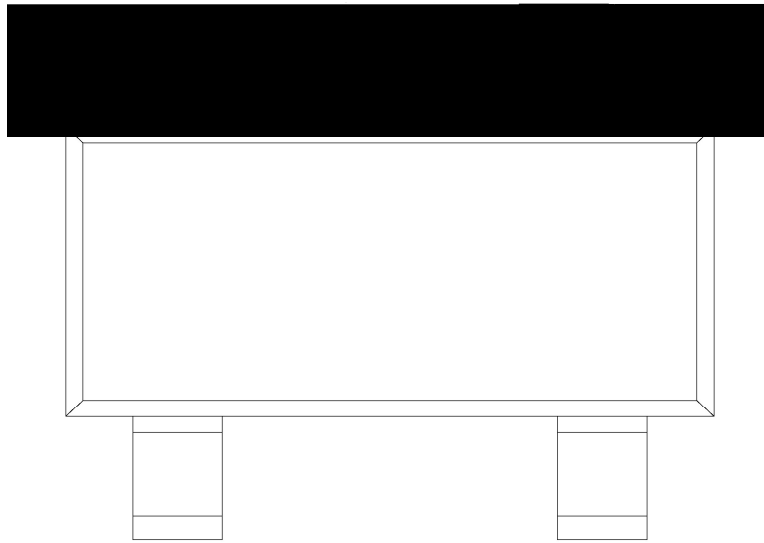
Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DSS}	60	V
Drain-Gate Voltage	V_{DGR}	60	V
Drain Current - Continuous	I_D	300	mA
Drain Current - Pulsed	I_{DM}	800	mA
Gate-Source Voltage - Continuous	V_{GSS}	± 20	V
Power Dissipation	P_D	350	mW
Storage Temperature Range	T_{stg}	-55~150	$^{\circ}C$

Parameter	Symbol	Test Conditions		Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	V_{DSS}	$V_{GS}=0$	$I_D=10\mu A$	60			V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{GS}=0$	$V_{DS}=60V$			1.0	μA
Gate-Source Leakage current	I_{GSS}	$V_{DS}=0V$	$V_{GS}=\pm 20V$			± 10	μA
Static Drain-Source On-Resistance	$R_{DS(on)(1)}$	$V_{GS}=10V$	$I_D=0.5A$			5	
	$R_{DS(on)(2)}$	$V_{GS}=5V$	$I_D=0.05A$			5.5	
Drain-Source Diode Forward Voltage	V_{SD}	$V_{GS}=0V$	$I_S=250mA$			1.5	V
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS}=V_{GS}$	$I_D=250\mu A$	1.0	1.6	2.5	V
Forward Transconductance	Y_{fs}	$V_{DS}=10V$	$I_D=0.2A$	80			ms
Drain-Source On-Voltage	$V_{DS(on)(1)}$	$V_{GS}=10V$	$I_D=500mA$			2.5	V
	$V_{DS(on)(2)}$	$V_{GS}=5.0V$	$I_D=50mA$			0.275	V
Turn-On Time	$t_{d(on)}$	$V_{DD}=25V$ $R_G=25$ $V_{gen}=10V$	$I_D=500mA$ $R_L=25$			20	ns
Turn-Off Time	$t_{d(off)}$					40	ns
Input Capacitance	C_{iss}	$V_{ds}=25V$ $f=1MHz$	$V_{GS}=0V$			50	pF
Output Capacitance	C_{oss}					25	pF
Reverse Transfer Capacitance	C_{rss}					5	pF



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Note:

H:



Temperature Profile for IR Reflow Soldering(Pb-Free)

- | | | | | | | |
|---|-------|-----|----|-----------|-------|--|
| 1 | 150 | 180 | 60 | 90sec; | Note: | 1.Preheating:150~180°C, Time:60~90sec. |
| 2 | 245±5 | | | 5±0.5sec; | | 2.Peak Temp.:245±5°C, Duration:5±0.5sec. |
| 3 | | | 2 | 10°C/sec. | | 3. Cooling Speed: 2~10°C/sec. |

260±5°C

10±1 sec.

Temp.:260±5°C

Time:10±1 sec