Rev.I May.-2022

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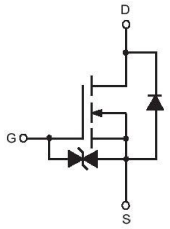
SOT-23 F G G H N I J MOS K L M N ON-CHANNEL MOSFET in a SOT-23 Plastic Package.

P Q%R - S T U V W X Y Z% [\ V WO] V ^ _ ` 2KVO < = B C O
Sensitive gate trigger current and Low Holding current.ESD protected up to 2KV. HF product.

a b c d%e f X g h R - O
IntenI d for use in general purpose switching and phase control applications

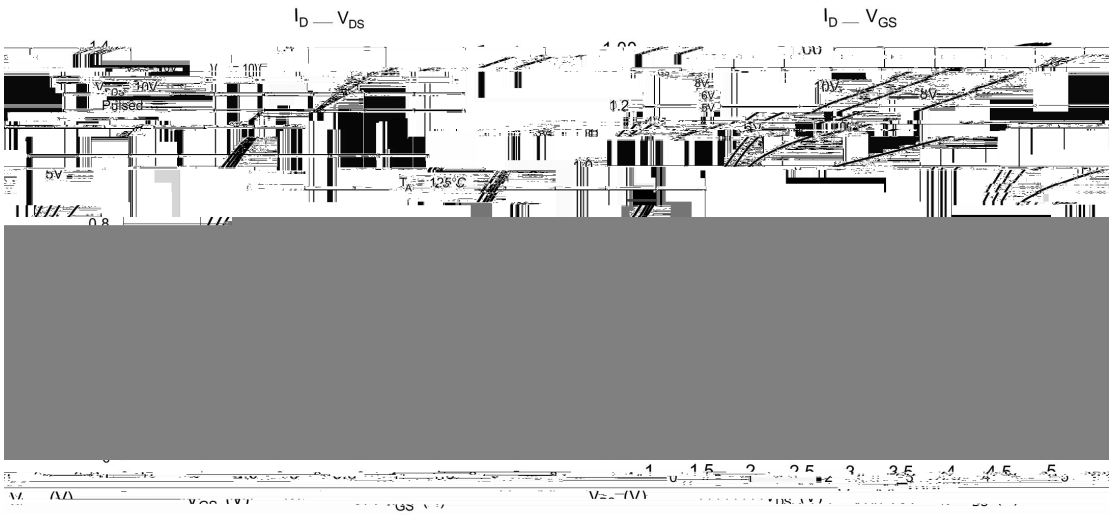


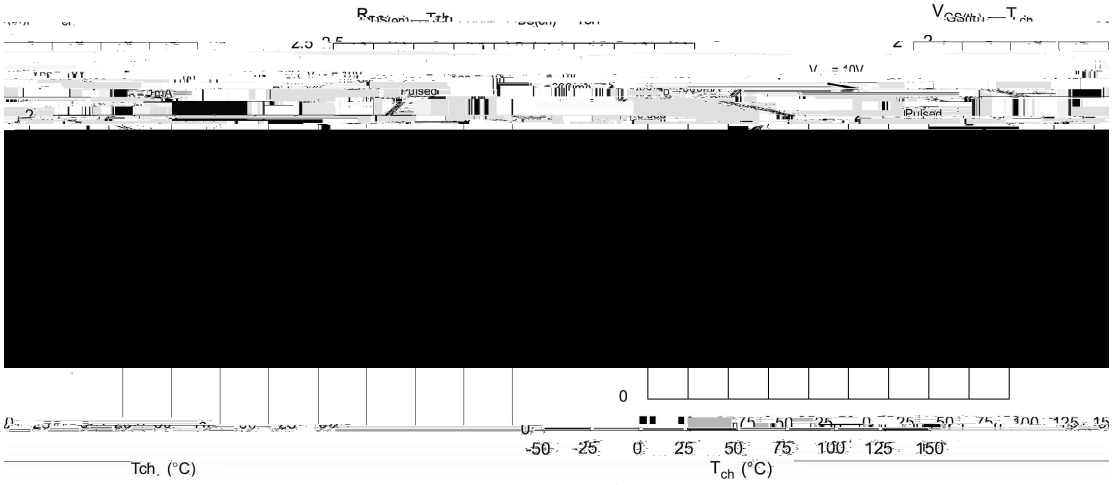
PIN1 i G PIN 2 i S PIN 3 i D

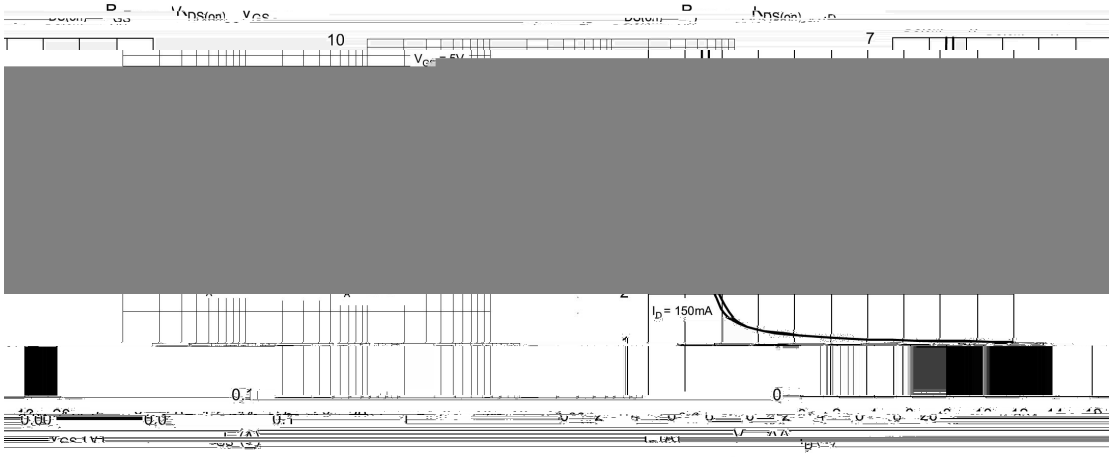
Marking	H702K

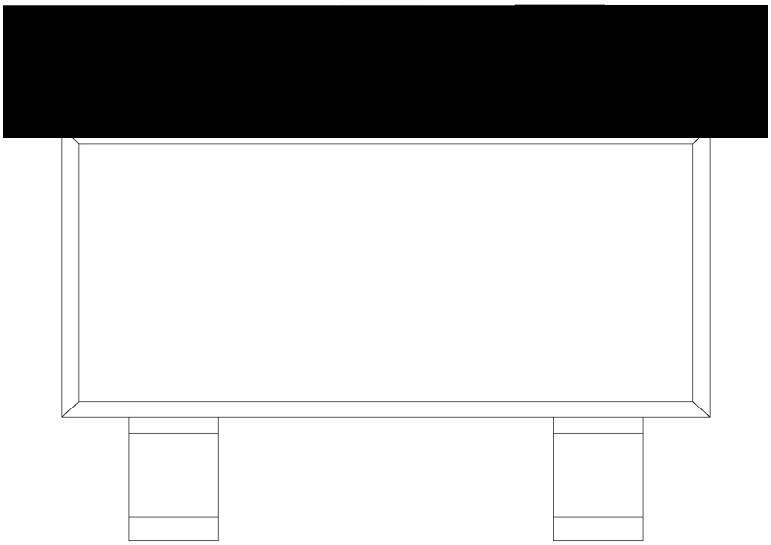
j k Parameter	l m Symbol	k n Rating	o h Unit
Drain-Source Voltage	V_{DSS}	60	V
Drain-Gate Voltage	V_{DGR}	60	V
Drain Current - Continuous	I_D	300	mA
Drain Current - Pulsed	I_{DM}	800	mA
Gate-Source Voltage - Continuous	V_{GSS}	±20	V
Power Dissipation	P_D	350	mW
Storage Temperature Range	T_{stg}	-55～150	℃

j k Parameter	l m Symbol	p q r s Test Conditions		t u n Min	v w n Typ	t x n Max	o h Unit
Drain–Source Breakdown Voltage	V_{DSS}	V_{GS}=0	I_D=10μA	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}=±20V			±10	μA
Static Drain-Source On-Resistance	$R_{DS(on)(1)}$	V_{GS}=10V	I_D=0.5A			5	Ω
	$R_{DS(on)(2)}$	V_{GS}=5V	I_D=0.05A			5.5	Ω
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=250uA	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=25Ω V_{gen}=10V	I_D=500 mA R_L=25Ω			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


I_D — V_{DS}
I_D — V_{GS}
Pulsed
T_A = 125°C


Pulsed
-50 -25 0 25 50 75 100 125 150
T_{ch} (°C)


I_D= 150mA



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Note:

H:

Temperature Profile for IR Reflow Soldering(Pb-Free)

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

260±5℃	10±1 sec.	Temp.:260±5℃	Time:10±1 sec