

• General Description

N-CHANNEL MOSFET in a SOT-23 Plastic Package.

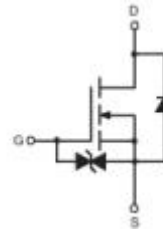
• Features

- Sensitive gate trigger current and Low Holding current.
- ESD protected up to 1KV.
- Very fast switching

• Application

- switching and phase control applications.
- SMPS 2nd Synchronous Rectifier

• Product Summary



$$V_{DS} = 60V$$

$$R_{DS(ON)} = 2.3\Omega$$

$$I_D = 300mA$$



SOT-23



• Ordering Information:

Part NO.	ZM2N7002K2
Marking	702K2
Packing Information	REEL TAPE
Basic ordering unit (pcs)	3000

• Absolute Maximum Ratings (T_C = 25°C)

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V _{DS}	60	V
Drain-Gate Voltage	V _{DGR}	60	V
Gate-Source Voltage	V _{GS}	±20	V
Continuous Drain Current	I _{D@TC=25°C}	300	mA
	I _{D@TC=75°C}	228	mA
	I _{D@TC=100°C}	189	mA
Pulsed Drain Current	I _{DM}	1200	mA
Total Power Dissipation	P _D	350	mW
Storage Temperature	T _{STG}	-55 to 150	°C

•Electronic Characteristics (T_a =25°C)

Parameter	Symbol	Condition	Min.	Typ	Max.	Unit
Drain-Source Breakdown Voltage	BV _{DSS}	V _{GS} =0V, I _D =10uA	60			V
Gate Threshold Voltage	V _{GS(TH)}	V _{GS} =V _{DS} , I _D =1mA	1.0	1.6	2.5	V
Drain-Source Leakage Current	I _{DSS}	V _{DS} =60V, V _{GS} =0V			1.0	uA
Gate- Source Leakage Current	I _{GSS}	V _{GS} =±20V, V _{DS} =0V			±10	uA
Static Drain-source On Resistance	R _{DS(ON)}	V _{GS} =10V, I _D =0.5A			2.3	Ω
		V _{GS} =5V, I _D =0.05A		2	2.7	Ω
Drain-Source On-Voltage	V _{DS(ON)}	V _{GS} =10V, I _D =500mA			2.5	V
Drain-Source On-Voltage	V _{DS(ON)}	V _{GS} =5.0V, I _D =50mA			0.275	V
Forward Transfer Admittance	G _{fs}	V _{DS} =5V, I _D = 0.2A	80			mS
Source-Drain Voltage	V _{SD}	I _s =500mA			1.28	V

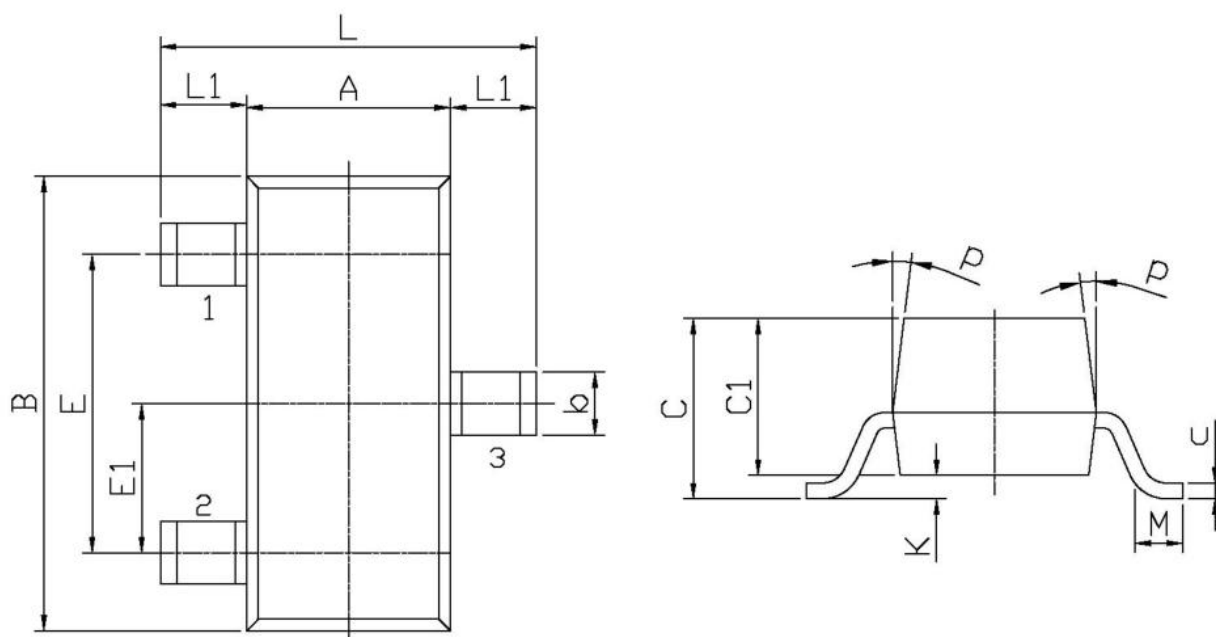
•Electronic Characteristics

Parameter	Symbol	Condition	Min.	Typ	Max.	Unit
Input capacitance	C _{iss}	V _{GS} = 0V V _{DS} =25V f = 1MHz	-		50	pF
Output capacitance	C _{oss}		-		25	
Reverse transfer capacitance	C _{rss}		-		5	
Turn – on delay time	t _{d(on)}	V _{DD} =25V I _D =500mA			20	ns
Turn - off delay time	t _{d(off)}	R _G =25Ω R _L =25Ω V _{gen} =10V			40	ns



●Dimensions(SOT23-3)

Unit: mm



Unit: mm

Symbol	Dimensions In Millimeters		Symbol	Dimensions In Millimeters	
	Min	Max		Min	Max
L	2.2	2.7	C	1.30Max	
L1	0.45	0.65	C1	0.90	1.20
A	1.15	1.50	c	0.05	0.20
B	2.70	3.10	K	0	0.10
E	1.70	2.10	M	0.20MIN	
E1	0.85	1.05	P	7°	
b	0.35	0.55			



●Electrical Characteristic Curve

