CYG WAYON
Let's make electronics safer!

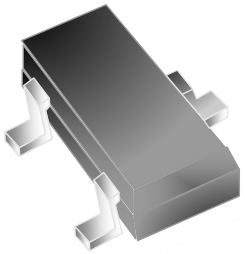
WM03P41M2

Order Code: WM03P41M2

P-Channel MOSFET

Features

- Super high density cell design for extremely low $R_{DS(ON)}$
- Exceptional on-resistance and maximum DC current capability
- Capable doing Cu wire bonding

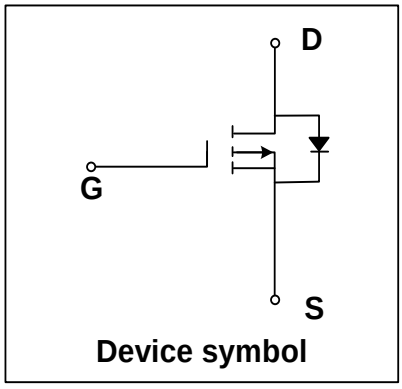


SOT-23-3L

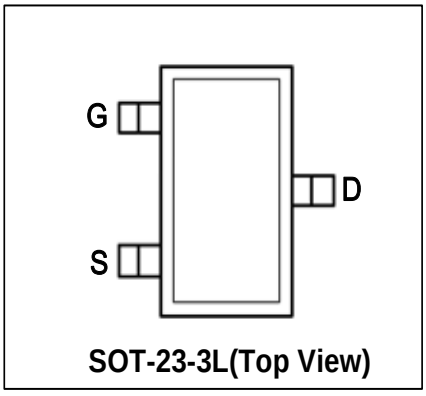
Applications

- Load Switch
- Portable Equipment and Battery Powered Systems

Schematic & PIN Configuration



Device symbol



SOT-23-3L(Top View)

Absolute Maximum Rating (T_{amb}=25°C unless otherwise specified)

Rating	Symbol	Value	Units
Drain-Source Voltage	V_{DS}	-30	V
Gate-Source Voltage	V_{GS}	±20	
Continuous Drain Current	I_D	-4.1	A
Pulsed Drain Current[1]	I_{DM}	-20	
Power Dissipation	P_D	0.3	W
Thermal Resistance from Junction to Ambient(t≤5s) [2]	$R_{\theta JA}$	417	°C/W
Operating Junction Temperature	T_J	150	℃
Storage Temperature	T_{STG}	–55 to 150	℃

Electrical Characteristics (T_{amb}=25°C unless otherwise specified)

Parameter	Symbol	Conditions	Minimum	Typical	Maximum	Units
Static Characteristics						
Drain-Source breakdown voltage	$V_{(BR)DSS}$	V_{GS}=0V, I_D=-250μA	-30	-	-	V
Zero gate voltage drain current	I_{DSS}	V_{DS}=-24V, V_{GS}=0V	-	-	-1	μA
Gate-Source leakage	I_{GSS}	V_{DS}=0V, V_{GS}=±20V	-	-	±100	nA
Gate-Source threshold voltage	$V_{GS(th)}$	V_{DS}= V_{GS}, I_D=-250μA	-1	-1.4	-3	V
Drain-source on-state resistance[1]	$R_{DS(on)}$	V_{GS}=-10V,I_D=-4.1A	-	50	60	mΩ
		V_{GS}=-4.5V,I_D=-3.0A	-	68	87	
Forward Trans conductance[1]	g_{fs}	V_{DS}=-5V,I_D=-4A	5.5	-	-	S
Dynamic Characteristics[2]						
Input capacitance	C_{iss}	V_{GS} =0V ,V_{DS} =-15V, f=1.0MHz	-	700	-	pF
Output capacitance	C_{oss}		-	120	-	
Reverse transfer capacitance	C_{rss}		-	75	-	
Switching Characteristics[2]						
Turn-on delay time	$t_{d(on)}$	V_{GS}=-10V,V_{DS}=-15V , R_L=3.6Ω,R_{GEN}=3Ω,	-	8.6	-	ns
Rise time	t_r		-	5.0	-	
Turn-off delay time	$t_{d(off)}$		-	28.2	-	
Fall Time	t_f		-	13.5	-	

Notes：1. Pulse test: Pulse width ≤300μs, Duty cycle ≤2%

2. These parameters have no way to verify.

Typical Characteristics

Fig 1. Output Characteristics

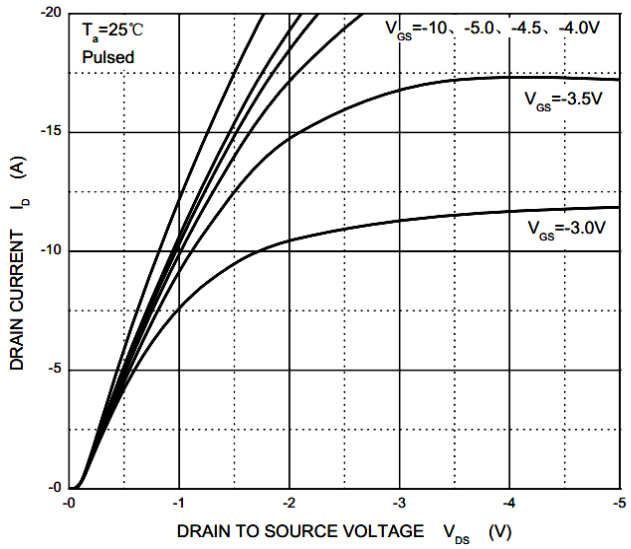


Fig 2. Transfer Characteristics

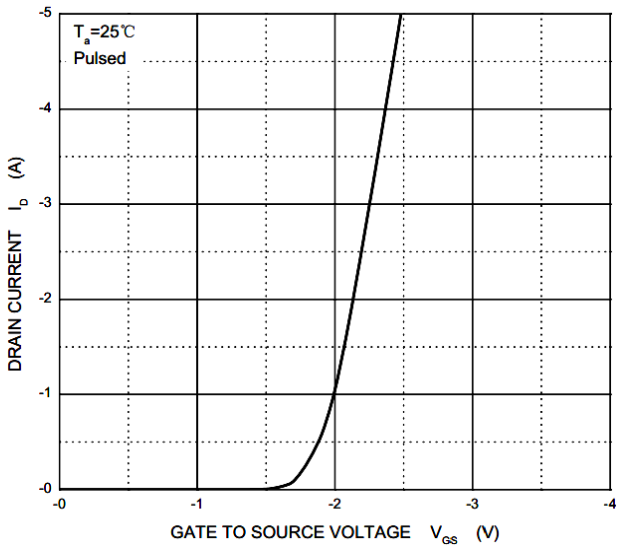


Fig 3. $R_{DS(ON)}$ vs. I_D

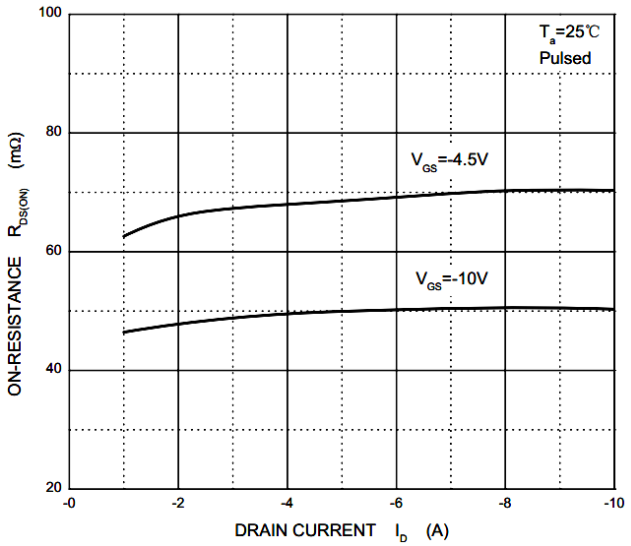


Fig 4. $R_{DS(ON)}$ vs. V_{GS}

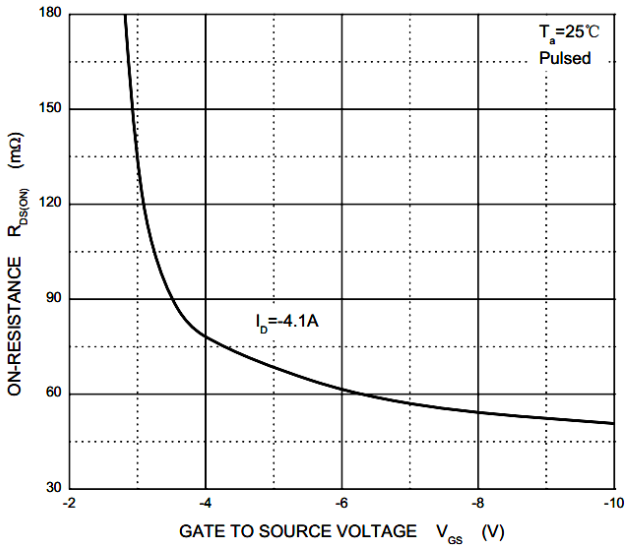
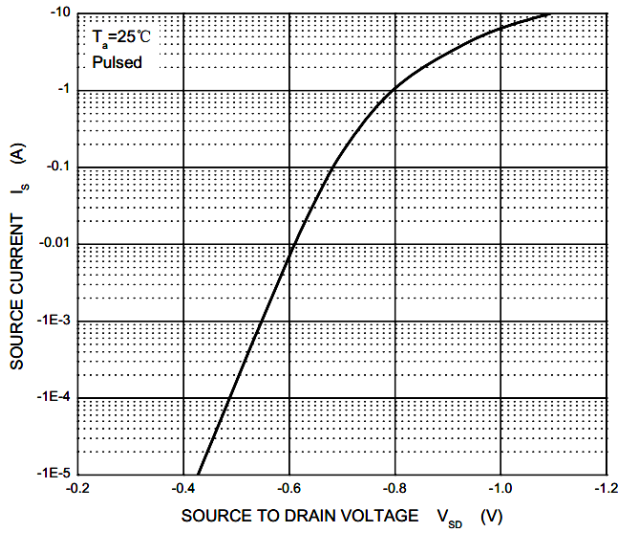
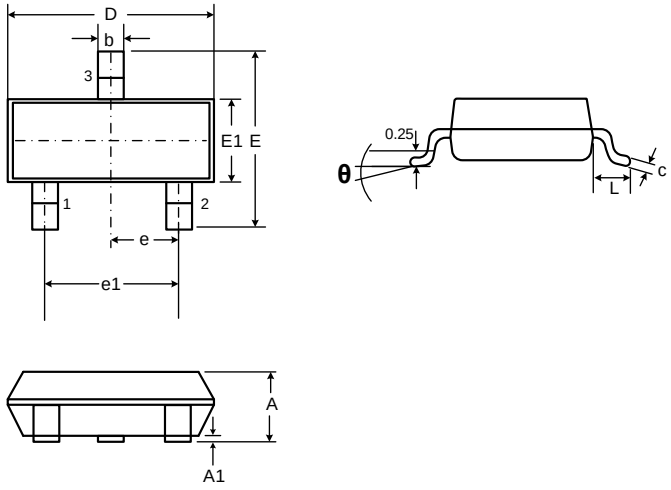


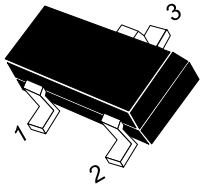
Fig 5.I_S vs. V_{SD}



Outline Drawing – SOT-23-3L

PACKAGE OUTLINE

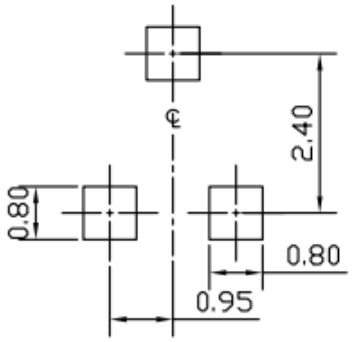




SOT-23-3L

DIMENSIONS

SYMBOL	MILLIMETER		INCHES	
	MIN	MAX	MIN	MAX
A	1.05	1.15	0.041	0.045
A1	0.00	0.10	0.000	0.004
b	0.30	0.50	0.012	0.020
c	0.10	0.20	0.004	0.008
D	2.82	3.02	0.111	0.119
E	2.65	2.95	0.104	0.116
E1	1.50	1.70	0.059	0.067
e	0.95 BSC		0.0374 BSC	
e1	1.80	2.00	0.071	0.079
L	0.55	0.75	0.021	0.029
θ	0	8°	0	8°



Unit:mm

Notes

1. Dimensioning and tolerances per ANSI Y14.5M, 1985.
2. Controlling Dimension: Inches
3. Dimensions are exclusive of mold flash and metal burrs.

Marking Codes

Part Number	WM03P41M2
Marking Code	3407

Package Information

Qty：3k/Reel

CONTACT INFORMATION

CYG WAYON CIRCUIT PROTECTION CO., LTD.
No.1001, Shiwan (7) Road, Pudong District, Shanghai, P.R.China.201202
Tel: 86-21-68969993 Fax: 86-21-50757680 Email: market@way-on.com
WAYON website: **http://www.way-on.com**
For additional information, please contact your local Sales Representative.

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