



Features

- High dense cell design for extremely low $R_{DS(ON)}$.
- Exceptional on-resistance and maximum DC current capability

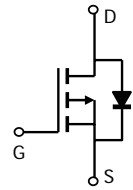
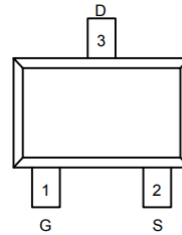
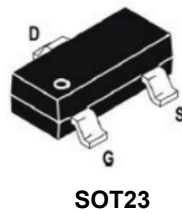
Product Summary

V_{DS}	$R_{DS(ON)}$ @-4.5V (Max)	$R_{DS(ON)}$ @-2.5V(Max)	$R_{DS(ON)}$ @-10V (Max)	I_D
-30V	75m Ω	100m Ω	65m Ω	-4.2A

Application

- PWM applications
- Load switch
- Power management

top view



Maximum ratings ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

Parameter Symbol		Value	Unit
Drain-Source Voltage	V_{DS}	-30	V
Gate-Source Voltage	V_{GS}	± 12	V
Continuous Drain Current	I_D	-4.2	A
Power Dissipation	P_D	350	mW
Thermal Resistance from Junction to Ambient ($t < 5s$)	$R_{\theta JA}$	357	$^{\circ}\text{C}/\text{W}$
Junction Temperature	T_J	150	$^{\circ}\text{C}$
Storage Temperature	T_{STG}	-55~+150	$^{\circ}\text{C}$

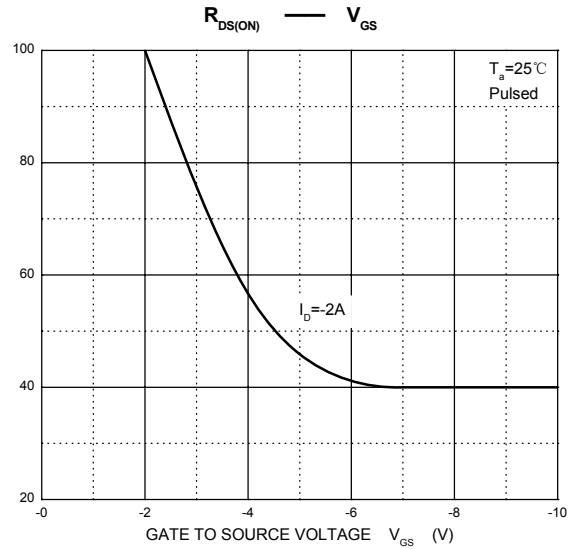
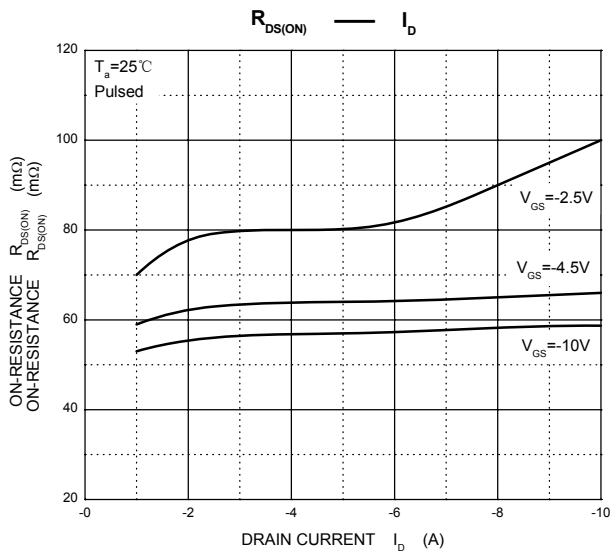
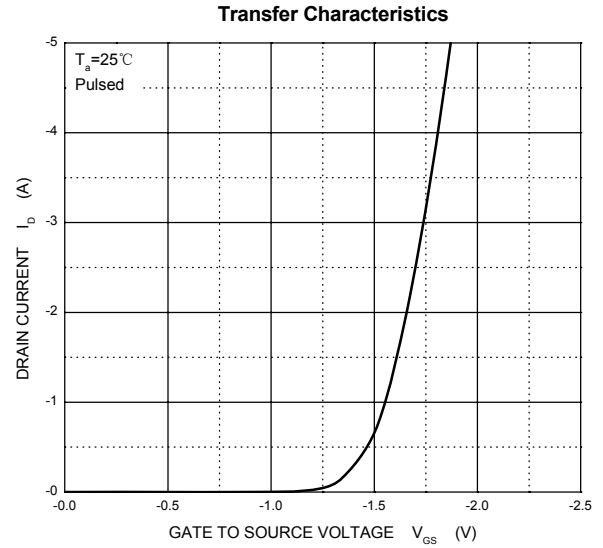
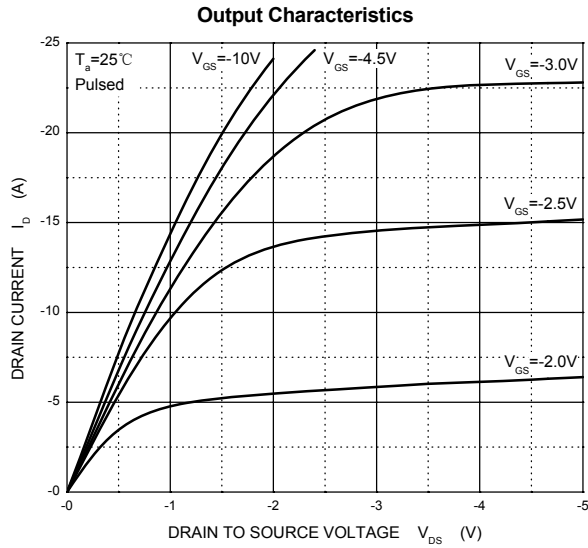
Electrical characteristics (T_a=25°C unless otherwise noted)

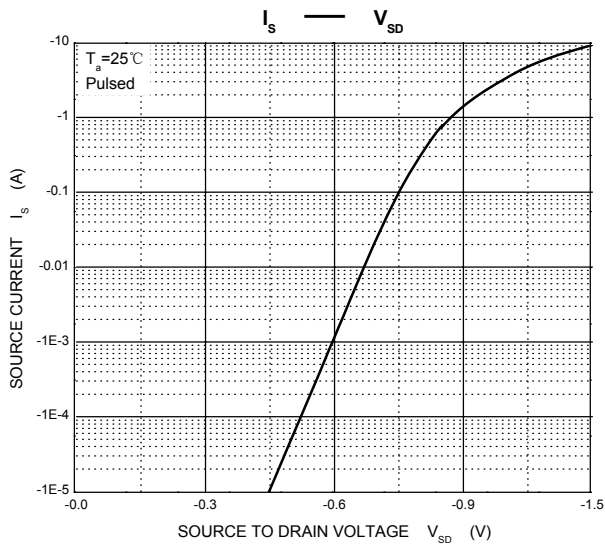
Parameter	Symbol	Test Condition	Min	Typ	Max	Units
Off characteristics						
Drain-source breakdown voltage	V _{(BR)DSS}	V _{GS} = 0V, I _D = -250μA	-30			V
Zero gate voltage drain current	I _{DSS}	V _{DS} = -24V, V _{GS} = 0V			-1	μA
Gate-source leakage current	I _{GSS}	V _{GS} = ±12V, V _{DS} = 0V			±100	nA
On characteristics						
Drain-source on-resistance (note 1)	R _{DS(on)}	V _{GS} = -10V, I _D = -4A			65	mΩ
		V _{GS} = -4.5V, I _D = -3A			75	mΩ
		V _{GS} = -2.5V, I _D = -1A			100	mΩ
Forward tranconductance (note 1)	g _{FS}	V _{DS} = -5V, I _D = -5A	7			S
Gate threshold voltage	V _{GS(th)}	V _{DS} = V _{GS} , I _D = -250μA	-0.5		-1.5	V
Dynamic characteristics (note 2)						
Input capacitance	C _{iss}	V _{DS} = -15V, V _{GS} = 0V, f = 1MHz		954		pF
Output capacitance	C _{oss}			115		pF
Reverse transfer capacitance	C _{rss}			77		pF
Switching characteristics (note 2)						
Turn-on delay time	t _{d(on)}	V _{GS} = -10V, V _{DS} = -15V, R _L = 3.6Ω, R _{GEN} = 6Ω			6.3	ns
Turn-on rise time	t _r				3.2	ns
Turn-off delay time	t _{d(off)}				38.2	ns
Turn-off fall Time	t _f				12	ns
Drain-source diode characteristics and maximum ratings						
Diode forward voltage (note 1)	V _{SD}	I _S = -1A, V _{GS} = 0V			-1	V

Note :

1. Pulse Test : Pulse width ≤ 300μs, duty cycle ≤ 2%.
2. These parameters have no way to verify.

Typical Characteristics



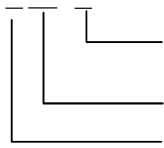


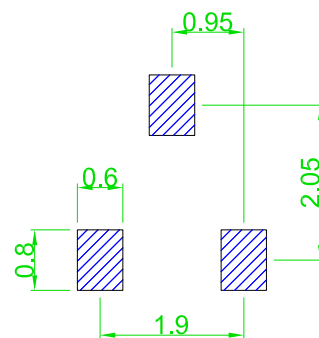
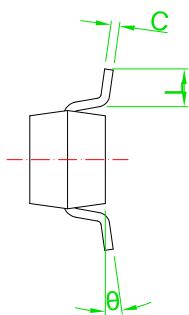
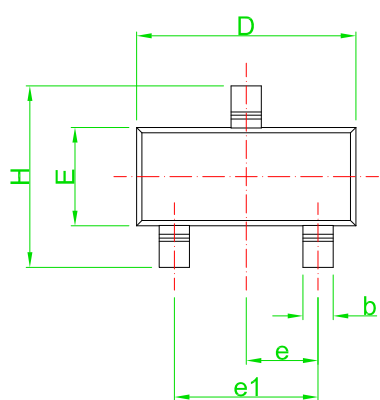
Ordering and Marking Information

Device	Marking	Package	Packaging	Quantity
ASDM3401ZA	3401	SOT23	Tape&Reel	3000/Reel

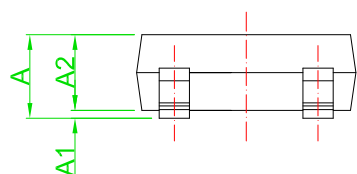
PACKAGE	MARKING
SOT23	<div style="border: 1px solid black; padding: 10px; width: fit-content; margin: 0 auto;">3401</div>

Ordering Number		Package
Lead Free	Halogen Free	
ASDM3401-ZA-R	ASDM3401G-ZA-R	SOT23

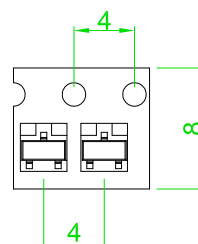
<p>ASDM3401G-ZA- R</p>  <ul style="list-style-type: none"> 1 Packing Type 2 Package Type 3 Green Package 	<ul style="list-style-type: none"> 1 T:Tube,R:Tape Reel 2 ZA: SOT23 3 blank : Lead Free <li style="padding-left: 20px;">G:Halogen Free
--	--



Recommended Land Pattern



Symbol	Dimensions in Millimeters		Dimensions in Inches	
	Min	Max	Min	Max
A	0.90	1.15	0.035	0.045
A1	0.00	0.10	0.000	0.004
A2	0.90	1.05	0.035	0.041
b	0.30	0.55	0.012	0.022
C	0.08	0.15	0.003	0.006
D	2.80	3.00	0.110	0.118
E	1.20	1.40	0.047	0.055
e	0.95 TYP		0.037 TYP	
e1	1.80	2.00	0.071	0.079
H	2.25	2.55	0.089	0.100
L	0.30	0.50	0.012	0.020
θ	0°	8°	0°	8°



IMPORTANT NOTICE

Xi'an Ascend Semiconductor incorporated MAKES NO WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, WITH REGARDS TO THIS DOCUMENT, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE (AND THEIR EQUIVALENTS UNDER THE LAWS OF ANY JURISDICTION).

Xi'an Ascend Semiconductor Incorporated and its subsidiaries reserve the right to make modifications, enhancements, improvements, corrections or other changes without further notice to this document and any product described herein. Xi'an Ascend Semiconductor Incorporated does not assume any liability arising out of the application or use of this document or any product described herein; neither does Xi'an Ascend Semiconductor Incorporated convey any license under its patent or trademark rights, nor the rights of others. Any Customer or user of this document or products described herein in such applications shall assume .

all risks of such use and will agree to hold Ascendsemi Incorporated and all the companies whose products are represented on Xi'an Ascend Semiconductor Incorporated website, harmless against all damages.

Xi'an Ascend Semiconductor Incorporated does not warrant or accept any liability whatsoever in respect of any products purchased through unauthorized sales channel. Should Customers purchase or use Xi'an Ascend Semiconductor Incorporated products for any unintended or unauthorized application, Customers shall indemnify and hold Xi'an Ascend Semiconductor Incorporated and its representatives harmless against all claims, damages, expenses, and attorney fees arising out of, directly or indirectly, any claim of personal injury or death associated with such unintended or unauthorized application.

www.ascendsemi.com

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [MOSFET](#) category:

Click to view products by [Ascend](#) manufacturer:

Other Similar products are found below :

[614233C](#) [648584F](#) [MCH3443-TL-E](#) [MCH6422-TL-E](#) [FDPF9N50NZ](#) [FW216A-TL-2W](#) [FW231A-TL-E](#) [APT5010JVR](#) [NTNS3A92PZT5G](#)
[IRF100S201](#) [JANTX2N5237](#) [2SK2464-TL-E](#) [2SK3818-DL-E](#) [FCA20N60_F109](#) [FDZ595PZ](#) [STD6600NT4G](#) [FSS804-TL-E](#) [2SJ277-DL-E](#)
[2SK1691-DL-E](#) [2SK2545\(Q,T\)](#) [D2294UK](#) [405094E](#) [423220D](#) [MCH6646-TL-E](#) [TPCC8103,L1Q\(CM](#) [367-8430-0972-503](#) [VN1206L](#)
[424134F](#) [026935X](#) [051075F](#) [SBVS138LT1G](#) [614234A](#) [715780A](#) [NTNS3166NZT5G](#) [751625C](#) [873612G](#) [IRF7380TRHR](#)
[IPS70R2K0CEAKMA1](#) [RJK60S3DPP-E0#T2](#) [RJK60S5DPK-M0#T0](#) [APT5010JVFR](#) [APT12031JFLL](#) [APT12040JVR](#) [DMN3404LQ-7](#)
[NTE6400](#) [JANTX2N6796U](#) [JANTX2N6784U](#) [JANTXV2N5416U4](#) [SQM110N05-06L-GE3](#) [SIHF35N60E-GE3](#)