

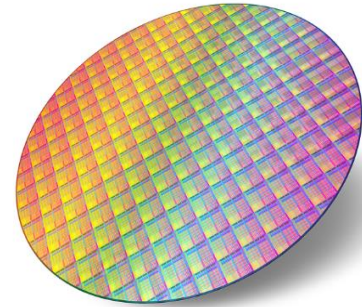


# AMDW1723F

Single N-channel Trench MOSFET 40V 1.95mΩ

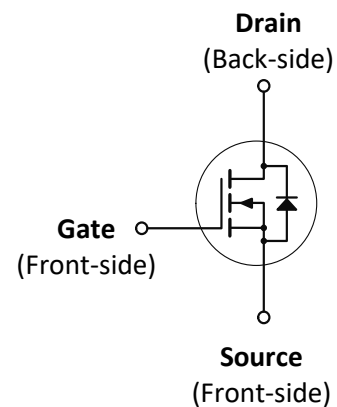
## FEATURES

- Ultra Low On-Resistance
- Bare die
- 100% Tested at Probe
- 175°C operating temperature
- AEC-Q101 qualified



## PRODUCT SUMMARY

$V_{DS}$	40	V
$R_{DS(on)}$	0.00195	$\Omega$
Die size	2.74 x 4.17	mm <sup>2</sup>
Thickness	180	$\mu\text{m}$



## ORDERING INFORMATION

Type / Ordering Code	Package	Marking	Packing	RoHS Status
AMDW1723F	Bare Die	not defined	Sawn on Film	Halogen Free

<http://www.magnachip.com>

**ABSOLUTE MAXIMUM RATINGS**, at  $T_C = 25^\circ\text{C}$ , unless otherwise specified

PARAMETER	SYMBOL	RATING	UNIT
Drain-source Voltage	$V_{DS}$	40	V
Gate-source Voltage	$V_{GS}$	$\pm 20$	V
Operating junction and storage temperature	$T_j, T_{stg}$	- 55 to +175	$^\circ\text{C}$

**WAFER LEVEL ELECTRICAL TEST**at  $T_j = 25^\circ\text{C}$ , unless otherwise specified

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITIONS
Drain-source breakdown voltage	$V_{(BR)DSS}$	40	-	-	V	$V_{GS}=0\text{ V}, I_D=250\ \mu\text{A}$
Gate threshold voltage	$V_{GS(th)}$	2.0	3.0	4.0	V	$V_{DS}=V_{GS}, I_D=250\ \mu\text{A}$
Zero gate voltage drain current	$I_{DSS}$	-	-	1	$\mu\text{A}$	$V_{DS}=32\text{ V}, V_{GS}=0\text{ V}$
		-	-	1	$\mu\text{A}$	$V_{DS}=40\text{ V}, V_{GS}=0\text{ V}$
Gate-source leakage current	$I_{GSS}$	-	-	$\pm 100$	nA	$V_{GS}=\pm 20\text{ V}, V_{DS}=0\text{ V}$
1) Drain-source on-state resistance	$R_{DS(on)}$	-	1.60	1.95	m $\Omega$	$V_{GS}=10\text{ V}, I_D=18\text{ A}$
		-	1.80	2.54		$V_{GS}=8\text{ V}, I_D=10\text{ A}$
Diode forward voltage	$V_{SD}$	-	0.8	1.2	V	$V_{GS}=0\text{ V}, I_S=18\text{ A}$

**PHYSICAL DATA**

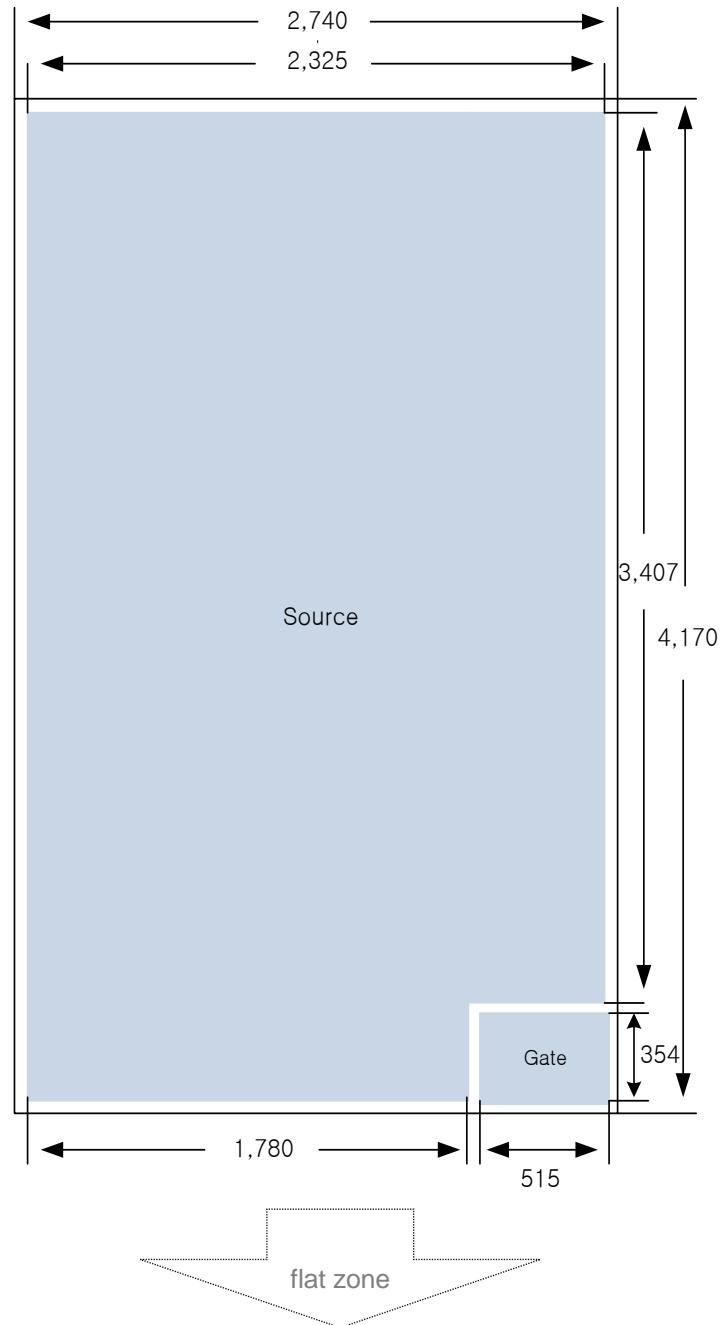
CONTENTS	CONFIGURATION
Passivation	Nitride (6,000 Å) / PSPI (5.5 $\mu\text{m}$ )
Back Metal Composition (Thickness)	Ti (1,000 Å) – NiV (5,000 Å) – Ag (2,200 Å)
Front Metal Composition (Thickness)	Al (40,000 Å)
Die Dimension (with S/L)	2,740 $\mu\text{m}$ x 4,170 $\mu\text{m}$
Gate Pad Dimension	515 $\mu\text{m}$ x 354 $\mu\text{m}$
Wafer Diameter	200 mm, with 100 flat
Wafer Thickness	180 $\mu\text{m}$
Scribe lane width	80 $\mu\text{m}$

**Notes**

- Limited by wafer sort-equipment

# Die information


Bare Die



( All labels are in dimension of μm )

**DISCLAIMER :**

The Products are not designed for use in hostile environments, including, without limitation, aircraft, nuclear power generation, medical appliances, and devices or systems in which malfunction of any Product can reasonably be expected to result in a personal injury. Seller's customers using or selling Seller's products for use in such applications do so at their own risk and agree to fully defend and indemnify Seller.

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单击下面可查看定价，库存，交付和生命周期等信息

[>>MAGNACHIP\(美格纳\)](#)