

**N-Channel Trench Power MOSFET**

**70V N-Ch Power MOSFET**

**Features**

- N-channel
- $V_{DS} = 70V, I_D = 70A$   
 $R_{DS(ON)} < 15m\Omega @ V_{GS} = 10V$
- Pb-free lead plating; RoHS compliant

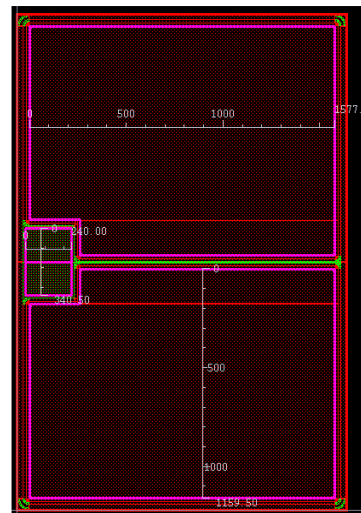
**Application**

- Synchronous Rectification
- Power management

Parameter	Value	Unit
$V_{DS}$	70	V
$R_{DS(on),typ}$   $V_{GS} = 10V$	10.5	m $\Omega$
$I_{D\_MAX}$	70	A

**Physical Characteristics:**

Wafer Size (inch)	8
Chip Size with scribe (mm)	1.760x2.570
Wafer Thickness (mil)	6
Top Metal	AlCu
Top Metal Thickness ( $\mu m$ )	4
Back Metal	Ti/Ni/Ag
Scribe Line ( $\mu m$ )	60
Gate Wire recommended	42 $\mu m$ Cu or 1mil Al
Source Wires recommended	$\Phi 15$ mil Al*2
Gross Die	6247
Source Pad Dimensions( $\mu m$ )	1577*1159*2
Gate Pad Dimensions( $\mu m$ )	240*340



G-Pad:240\*340; S-Pad: 1577\*1159

**Electrical Characteristics at T<sub>j</sub>=25°C (unless otherwise specified)**

Parameter	Symbol	Test Condition	Value			Unit
			Min.	Typ.	Max.	
Drain to Source Breakdown Voltage	V <sub>(BR)DSS</sub>	V <sub>GS</sub> =0V, I <sub>D</sub> =250μA	72	78		V
Gate Threshold Voltage	V <sub>GS(th)</sub>	V <sub>GS</sub> =V <sub>DS</sub> , I <sub>D</sub> =250μA	2	3	4	V
Zero Gate Voltage Drain Current	I <sub>DSS</sub>	V <sub>GS</sub> =0V, V <sub>DS</sub> =70V, T <sub>j</sub> =25°C	-		1	μA
		V <sub>GS</sub> =0V, V <sub>DS</sub> =70V, T <sub>j</sub> =85°C		-	100	
Gate to Source Leakage Current	I <sub>GSS</sub>	V <sub>GS</sub> =±25V, V <sub>DS</sub> =0V	-		±100	nA
Drain to Source on Resistance	R <sub>DS(on)</sub>	V <sub>GS</sub> =10V, I <sub>D</sub> =20A	-	10.5	15	mΩ
Gate Resistance	R <sub>G</sub>	V <sub>GS</sub> =0V, V <sub>DS</sub> =0V, f=1MHz	-	1.2	-	Ω