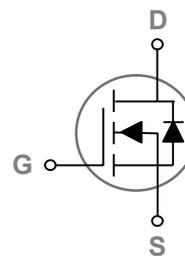




HMNC150R16

Features

- Die in 8" Wafer Form
- 150V, N-Channel
- $R_{DS(ON)}=16m\Omega$ (Max.) @ $V_{GS}=10V$



Die Description

Parameter	Parameter	Rating	CHIP DRAWING
Die Size (with SL)	3560 X 2860	um ²	
Gate Pad Size	320 X 450		
Source Pad Size	Full Metalized Source Region		
Scribe Line Size	60	um	
Wafer size	200	mm	
Wafer Thickness	8 (±0.8)	mil	
Top Metallization	4um, Al-Cu		
Back Metallization	Ti/Ni/Ag (1/3/10 KÅ)		
Gate Bond Wire	1.3 mil Cu x 1		
Source Bond Wire	80 mil Al Ribbon Stitch x 1		
Estimated Gross Die	2800		

Absolute Maximum Ratings $T_c=25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Rating	Unit
V_{DSS}	Drain-Source Voltage	150V	V
V_{GSS}	Gate-Source Voltage	±20V	V
T_J	Operating Junction Temperature Range	-55 to 150°C	°C
T_{STG}	Storage Temperature Range	-55 to 150°C	°C

Electrical Characteristics ($T_J=25^\circ\text{C}$, unless otherwise noted)

Symbol	Parameter	Conditions	Min.	Typ.	Max.	Unit
BV_{DSS}	Drain-Source Breakdown Voltage	$V_{GS}=0V, I_D=250\mu A$	150	---	---	V
I_{DSS}	Drain-Source Leakage Current	$V_{DS}=120V, V_{GS}=0V, T_J=25^\circ\text{C}$	---	---	1	uA
		$V_{DS}=120V, V_{GS}=0V, T_J=85^\circ\text{C}$	---	---	10	uA
I_{GSS}	Gate-Source Leakage Current	$V_{GS}=\pm 20V, V_{DS}=0V$	---	---	±100	nA
$R_{DS(ON)}$	Static Drain-Source On-Resistance	$V_{GS}=10V, I_D=30A$	---	13	16	mΩ
$V_{GS(th)}$	Gate Threshold Voltage	$V_{GS}=V_{DS}, I_D=250\mu A$	2.5	3.5	4.5	V