



-150V P Channel Enhancement MOSFET Wafer Datasheet

FEATURES

- P-Channel,-150V
- $R_{DS(ON)} = 242\text{m}\Omega$ (Typ.)@ $V_{GS}=-10\text{V}$
- Exceptional on-resistance and maximum DC current capability
high density cell design for extremely low RDS(ON)



Bonding Pad Information	Chip Information
(2000,1300) 	Wafer Name: DC6M150P242M7 Wafer Diameter: 6 inches Wafer Thickness: 7 mils Front-side Metallization: Al/Si/Cu (4um) Back-side Metallization: Ti/Ni/Ag Bonding Type: Gate: 1.5mil Cu x 1 Source: 1.5mil Cu x 12 Die Size (without scribe line): 2000um x 1300um Scribe Line Width: 60um Gate Pad Size: 180um x 180um Gross Die: 5.5K ea

ABSOLUTE MAXIMUM RATINGS ($T_c=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Limit	Units
Drain-Source Voltage	V_{DS}	-150	V
Gate-Source Voltage	V_{GS}	± 20	V
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55 to 150	°C

ELECTRICAL CHARACTERISTICS ($T_c=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Units
Drain-Source Breakdown Voltage	BV_{DSS}	$V_{GS}=0\text{V}, I_D=-250\mu\text{A}$	-150			V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS}=-120\text{V}, V_{GS}=0\text{V}$			-1	μA
Gate-Body Leakage Current	I_{GSS}	$V_{GS}=\pm 20\text{V}, V_{DS}=0\text{V}$			± 100	nA
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS}=V_{GS}, I_D=-250\mu\text{A}$	-2	-3	-4	V
Drain-Source On-State Resistance	$R_{DS(ON)}$	$V_{GS}=-10\text{V}, I_D=-1\text{A}$		242	296	m ohm

Notes:

- 1.Pulse Test:Pulse Width $\leq 300\text{us}$, Duty Cycle $\leq 2\%$.
- 2.RDS(ON) calculated by SOP-8 Package Type.