

## isc N-Channel MOSFET Transistor

**IPD15N06S2L64**

### FEATURES

- Drain Current :  $I_D = 19A @ T_c=25^\circ\text{C}$
- Drain Source Voltage :  $V_{DSS} = 55V (\text{Min})$
- Static Drain-Source On-Resistance :  $R_{DS(on)} = 64m\Omega (\text{Max})$
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

### DESCRIPTION

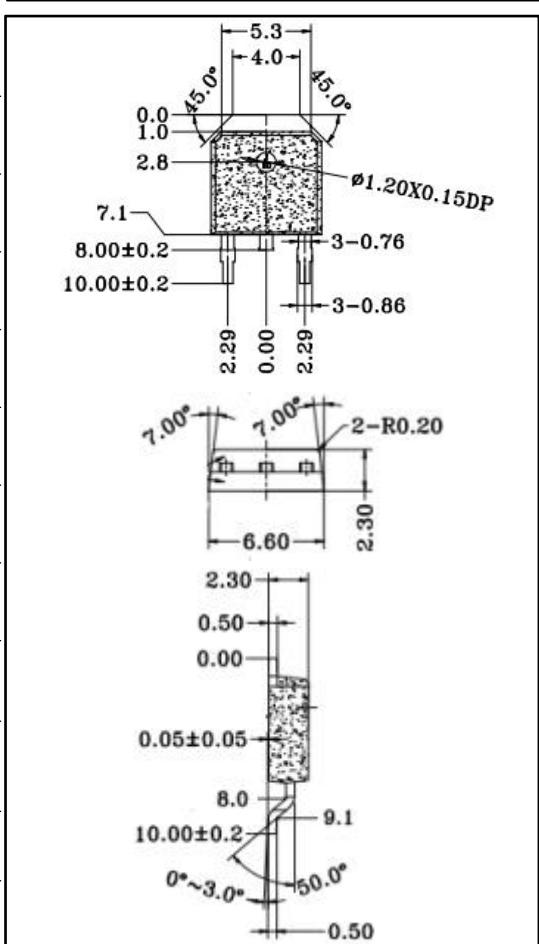
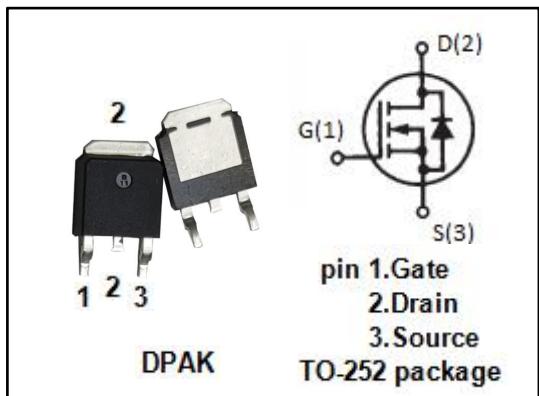
- motor drive, DC-DC converter, power switch and solenoid drive.

### ABSOLUTE MAXIMUM RATINGS( $T_a=25^\circ\text{C}$ )

SYMBOL	PARAMETER	VALUE	UNIT
$V_{DSS}$	Drain-Source Voltage	55	V
$V_{GS}$	Gate-Source Voltage-Continuous	$\pm 20$	V
$I_D$	Drain Current-Continuous	19	A
$I_{DM}$	Drain Current-Single Pulse	76	A
$P_D$	Total Dissipation @ $T_c=25^\circ\text{C}$	47	W
$T_J$	Max. Operating Junction Temperature	-55~175	$^\circ\text{C}$
$T_{stg}$	Storage Temperature	-55~175	$^\circ\text{C}$

### THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th j-c}$	Thermal Resistance, Junction to Case	3.2	$^\circ\text{C}/\text{W}$



**isc N-Channel MOSFET Transistor****IPD15N06S2L64****ELECTRICAL CHARACTERISTICS****T<sub>C</sub>=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V <sub>(BR)DSS</sub>	Drain-Source Breakdown Voltage	V <sub>GS</sub> = 0; I <sub>D</sub> = 1.0mA	55	--	V
V <sub>GS(th)</sub>	Gate Threshold Voltage	V <sub>DS</sub> = 10V; I <sub>D</sub> = 14uA	1.2	2.0	V
R <sub>Ds(on)</sub>	Drain-Source On-Resistance	V <sub>GS</sub> = 10V; I <sub>D</sub> = 13A V <sub>GS</sub> = 4V; I <sub>D</sub> = 13A	--	64 85	mΩ
I <sub>GSS</sub>	Gate-Body Leakage Current	V <sub>GS</sub> = ±20V; V <sub>DS</sub> = 0	--	±0.1	uA
I <sub>DSs</sub>	Zero Gate Voltage Drain Current	V <sub>DS</sub> = 55V; V <sub>GS</sub> = 0	--	1.0	uA
V <sub>SD</sub>	Forward On-Voltage	I <sub>S</sub> = 15A; V <sub>GS</sub> = 0	--	1.3	V

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