



**KERSEMI**

**IRFZ48N**

**FEATURES**

- Drain Current  $-I_D = 64A @ T_C = 25^\circ C$
- Drain Source Voltage-  
:  $V_{DSS} = 55V (Min)$
- Static Drain-Source On-Resistance  
:  $R_{DS(on)} = 0.014 \Omega (Max)$
- Fast Switching

**DESCRIPTION**

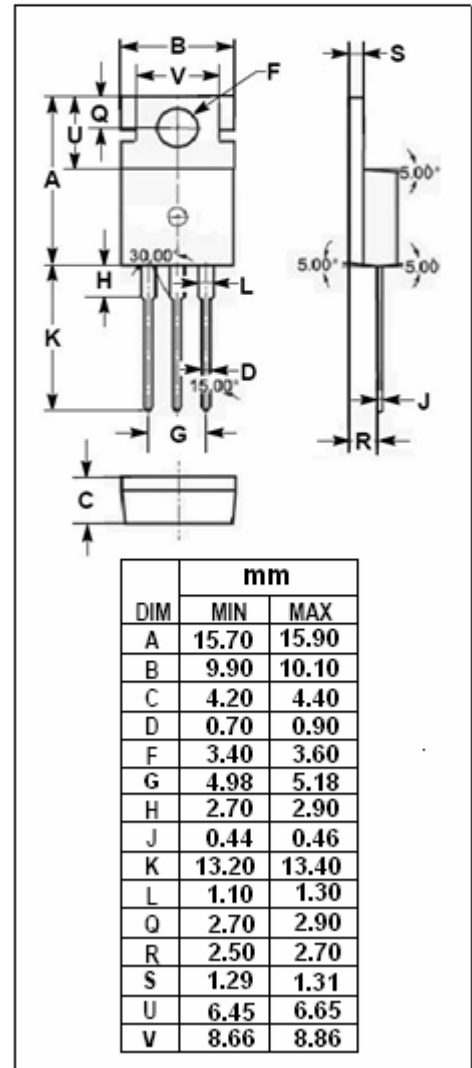
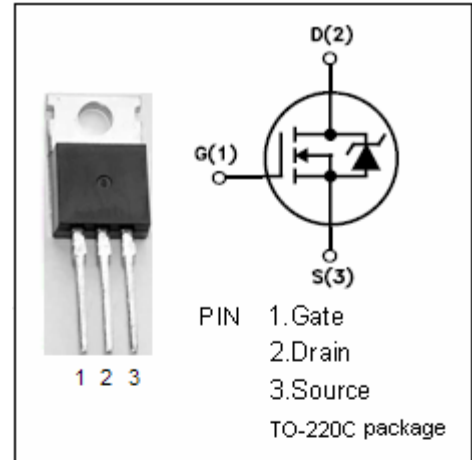
- Designed for use in switch mode power supplies and general purpose applications.

**ABSOLUTE MAXIMUM RATINGS( $T_a = 25^\circ C$ )**

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	64	A
$I_{DM}$	Drain Current-Single Pluse	210	A
$P_D$	Total Dissipation @ $T_C = 25^\circ C$	130	W
$T_J$	Max. Operating Junction Temperature	175	$^\circ C$
$T_{stg}$	Storage Temperature	-55~175	$^\circ C$

**THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
$R_{th j-c}$	Thermal Resistance, Junction to Case	1.15	$^\circ C/W$
$R_{th j-a}$	Thermal Resistance, Junction to Ambient	62	$^\circ C/W$





**KERSEMI**

**IRFZ48N**

**ELECTRICAL CHARACTERISTICS**

$T_C=25^{\circ}\text{C}$  unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{(BR)DSS}$	Drain-Source Breakdown Voltage	$V_{GS}= 0; I_D= 0.25\text{mA}$	55		V
$V_{GS(th)}$	Gate Threshold Voltage	$V_{DS}= V_{GS}; I_D= 0.25\text{mA}$	2	4	V
$R_{DS(on)}$	Drain-Source On-Resistance	$V_{GS}= 10\text{V}; I_D= 32\text{A}$		0.014	$\Omega$
$I_{GSS}$	Gate-Body Leakage Current	$V_{GS}= \pm 20\text{V}; V_{DS}= 0$		$\pm 100$	nA
$I_{DSS}$	Zero Gate Voltage Drain Current	$V_{DS}= 55\text{V}; V_{GS}= 0$ $V_{DS}= 55\text{V}; V_{GS}= 0; T_j= 150^{\circ}\text{C}$		25 250	$\mu\text{A}$
$V_{SD}$	Forward On-Voltage	$I_S= 32\text{A}; V_{GS}= 0$		1.3	V