

**IRF830**

## N-channel mosfet transistor

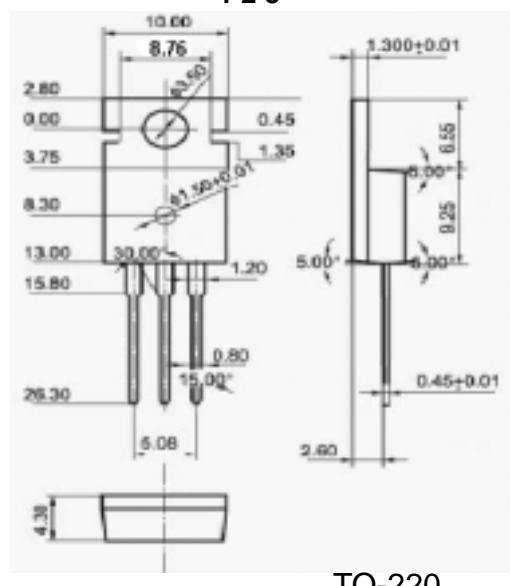


## ◆ Features

- With TO-220 package
  - Simple drive requirements
  - Fast switching
  - $V_{DSS}=500V$ ;  $R_{DS(ON)} = 1.5 \Omega$ ;  $I_D=4.5A$
  - 1.gate 2.drain 3.source

#### ◆ Absolute Maximum Ratings Tc=25

SYMBOL	PARAMETER	RATING	UNIT
$V_{DSS}$	Drain-source voltage ( $V_{GS}=0$ )	500	V
$V_{GS}$	Gate-source voltage	$\pm 20$	V
$I_D$	Drain Current-continuous@ $T_C=25$	4.5	A
$P_{tot}$	Total Dissipation@ $T_C=25$	100	W
$T_j$	Max. Operating Junction temperature	150	
$T_{stg}$	Storage temperature	-65~150	



## ◆ Electrical Characteristics Tc=25

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{(BR)DSS}$	Drain-source breakdown voltage	$V_{GS}=0$ ; $I_D=0.25\text{mA}$	500		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-stage resistance	$V_{GS}=10\text{V}$ ; $I_D=2.7\text{A}$		1.5	
$I_{GSS}$	Gate source leakage current	$V_{GS}=\pm 20\text{V}$ ; $V_{DS}=0$		$\pm 100$	nA
$I_{DSS}$	Zero gate voltage drain current	$V_{DS}=500\text{V}$ ; $V_{GS}=0$		1.0	uA
$V_{SD}$	Diode forward voltage	$I_F=4.5\text{A}$ ; $V_{GS}=0$		1.6	V