

## isc N-Channel MOSFET Transistor

## IRF540A

## FEATURES

- Static drain-source on-resistance:  
 $R_{DS(on)} \leq 52m\Omega$
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

## APPLICATIONS

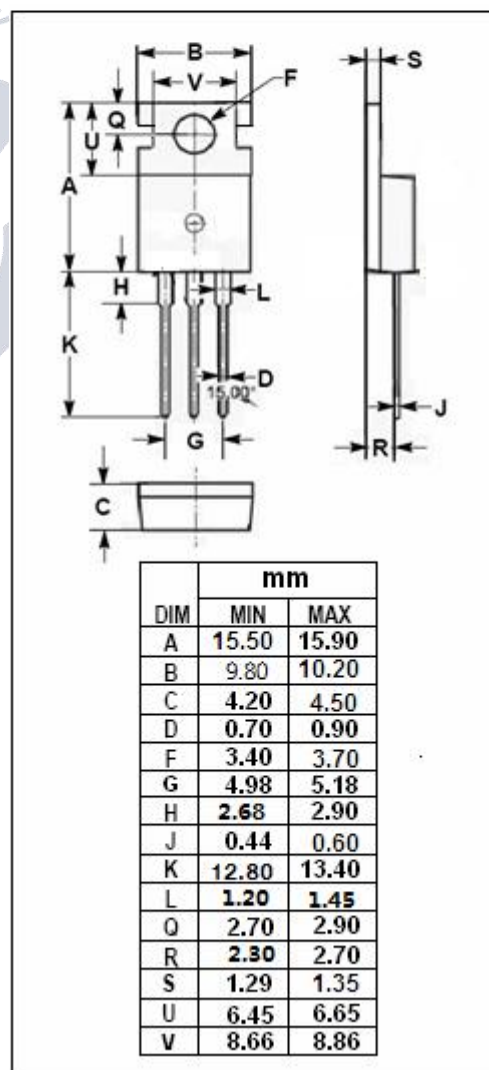
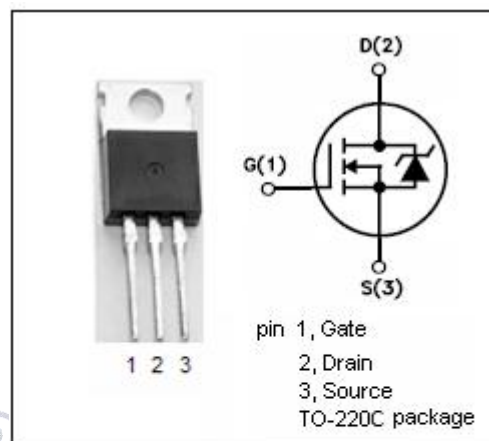
- Designed especially for high voltage,high speed applications, such as off-line switching power supplies.

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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{DS}$	Drain-Source Voltage	100	V
$V_{GS}$	Gate-Source Voltage-Continuous	$\pm 20$	V
$I_D$	Drain Current-Continuous@ $T_C=25^\circ C$	28	A
$I_{DM}$	Drain Current-Single Plused	110	A
$P_D$	Total Dissipation @ $T_C=25^\circ C$	110	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	1.36	$^\circ C/W$



**isc N-Channel MOSFET Transistor****IRF540A****ELECTRICAL CHARACTERISTICS****T<sub>C</sub>=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
V <sub>(BR)DSS</sub>	Drain-Source Breakdown Voltage	V <sub>GS</sub> = 0; I <sub>D</sub> = 0.25mA	100			V
V <sub>GS(th)</sub>	Gate Threshold Voltage	V <sub>DS</sub> = V <sub>GS</sub> ; I <sub>D</sub> = 0.25mA	2		4	V
R <sub>DS(on)</sub>	Drain-Source On-Resistance	V <sub>GS</sub> = 10V; I <sub>D</sub> = 14A			52	mΩ
I <sub>GSS</sub>	Gate-Body Leakage Current	V <sub>GS</sub> = ±20V; V <sub>DS</sub> = 0			±100	nA
I <sub>DSS</sub>	Zero Gate Voltage Drain Current	V <sub>DS</sub> = 100V; V <sub>GS</sub> = 0			10	μA
		V <sub>DS</sub> = 80V; V <sub>GS</sub> = 0; T <sub>C</sub> = 150°C			100	
V <sub>SD</sub>	Forward On-Voltage	I <sub>S</sub> = 28A; V <sub>GS</sub> = 0			1.5	V

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