

## isc N-Channel MOSFET Transistor

## FS7VS-18A

## FEATURES

- Drain Current  $-I_D=7A@T_C=25^{\circ}C$
- Drain Source Voltage  $-V_{DSS}=900V(\text{Min})$
- Static Drain-Source On-Resistance  
 $-R_{DS(on)}=2.0\Omega(\text{Max})$

## DESCRIPTION

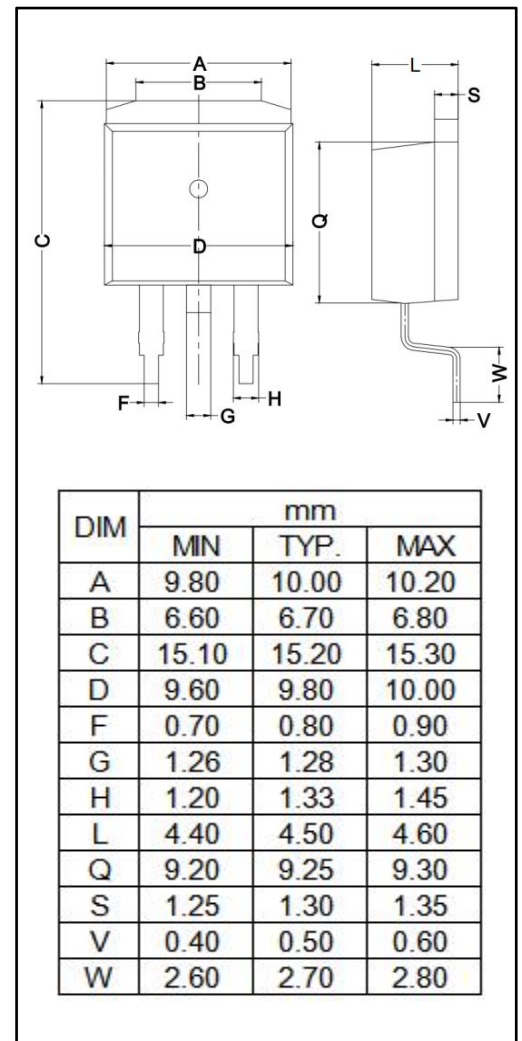
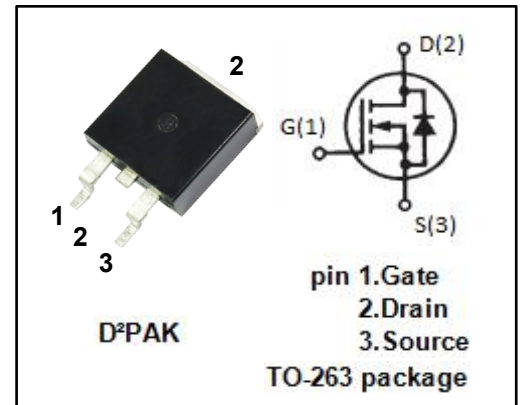
- Motor drive, DC-DC converter, power switch and solenoid drive.

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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{DSS}$	Drain-Source Voltage	900	V
$V_{GS}$	Gate-Source Voltage-Continuous	$\pm 30$	V
$I_D$	Drain Current-Continuous	7	A
$I_{DM}$	Drain Current-Single Pluse	21	A
$P_D$	Total Dissipation @ $T_C=25^{\circ}C$	150	W
$T_J$	Max. Operating Junction Temperature	150	$^{\circ}C$
$T_{stg}$	Storage Temperature	-55~150	$^{\circ}C$

## THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	0.83	$^{\circ}C/W$



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

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)DSS}$	Drain-Source Breakdown Voltage	$V_{GS}=0$ ; $I_D=1\text{mA}$	900	--	--	V
$V_{GS(th)}$	Gate Threshold Voltage	$V_{DS}=V_{GS}$ ; $I_D=1\text{mA}$	2.0	3.0	4.0	V
$R_{DS(on)}$	Drain-Source On-Resistance	$V_{GS}=10\text{V}$ ; $I_D=3\text{A}$	--	1.54	2.0	$\Omega$
$I_{GSS}$	Gate-Body Leakage Current	$V_{GS}=\pm 25\text{V}$ ; $V_{DS}=0$	--	--	$\pm 10$	$\mu\text{A}$
$I_{DSS}$	Zero Gate Voltage Drain Current	$V_{DS}=900\text{V}$ ; $V_{GS}=0$	--	--	1	mA
$V_{SD}$	Forward On-Voltage	$I_S=3\text{A}$ ; $V_{GS}=0$	--	1.0	1.5	V

## Product Disclaimer

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