

isc N-Channel MOSFET Transistor

75N75

FEATURES

- Drain Current $-I_D = 75A @ T_C = 25^\circ C$
- Drain Source Voltage-
: $V_{DSS} = 75V$ (Min)
- Static Drain-Source On-Resistance
: $R_{DS(on)} = 0.011 \Omega$ (Max)
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

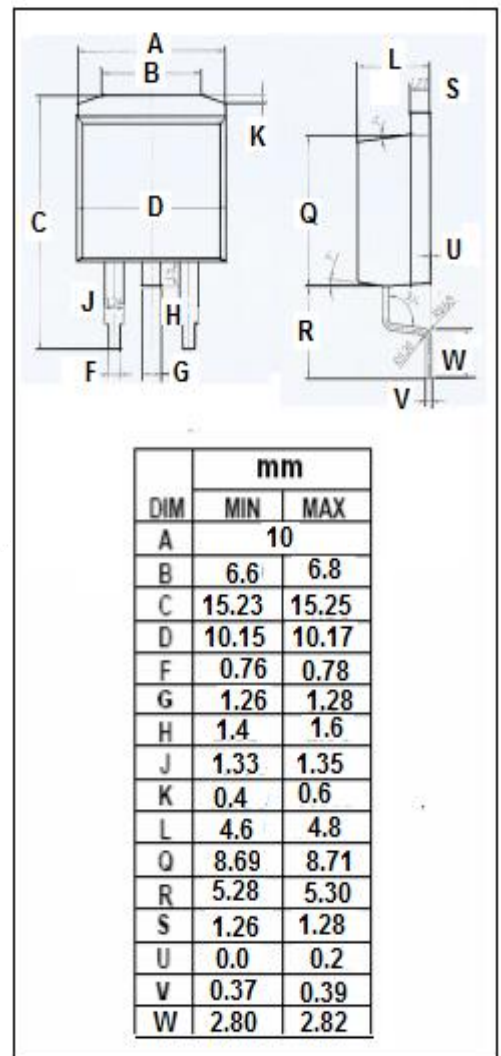
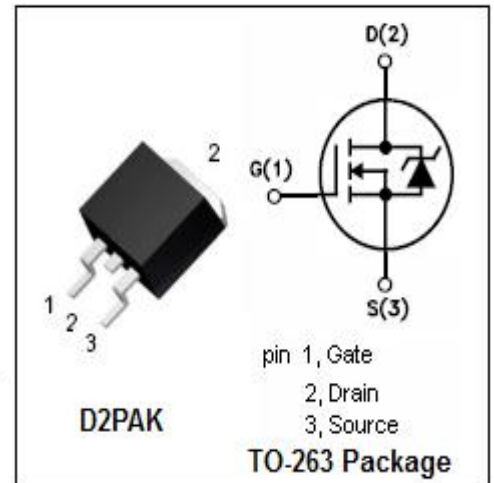
- Solenoid and relay drivers
- DC motor control
- DC-DC converters DC
- Automotive environment

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage	75	V
V_{GS}	Gate-Source Voltage-Continuous	± 20	V
I_D	Drain Current-Continuous@ $T_C = 25^\circ C$	75	A
	Drain Current-Continuous@ $T_C = 100^\circ C$	60	
I_{DM}	Drain Current-Single Pluse	300	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	0.65	$^\circ C/W$
$R_{th j-a}$	Thermal Resistance, Junction to Ambient	62	$^\circ C/W$



isc N-Channel MOSFET Transistor**75N75****ELECTRICAL CHARACTERISTICS** $T_C=25^{\circ}\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{(BR)DSS}$	Drain-Source Breakdown Voltage	$V_{GS}=0; I_D=0.25\text{mA}$	75		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	$V_{GS}=10\text{V}; I_D=40\text{A}$		0.011	Ω
I_{GSS}	Gate-Body Leakage Current	$V_{GS}=\pm 20\text{V}; V_{DS}=0$		± 100	nA
I_{DSS}	Zero Gate Voltage Drain Current	$V_{DS}=75\text{V}; V_{GS}=0$ $V_{DS}=60\text{V}; V_{GS}=0; T_j=150^{\circ}\text{C}$		1 100	μA
V_{SD}	Forward On-Voltage	$I_S=78\text{A}; V_{GS}=0$		1.5	V

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