

**Isc N-Channel MOSFET Transistor**
**IRFSL4020PBF**
**• FEATURES**

- With TO-262 packaging
- High speed switching
- Low gate input resistance
- Standard level gate drive
- Easy to use
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**• APPLICATIONS**

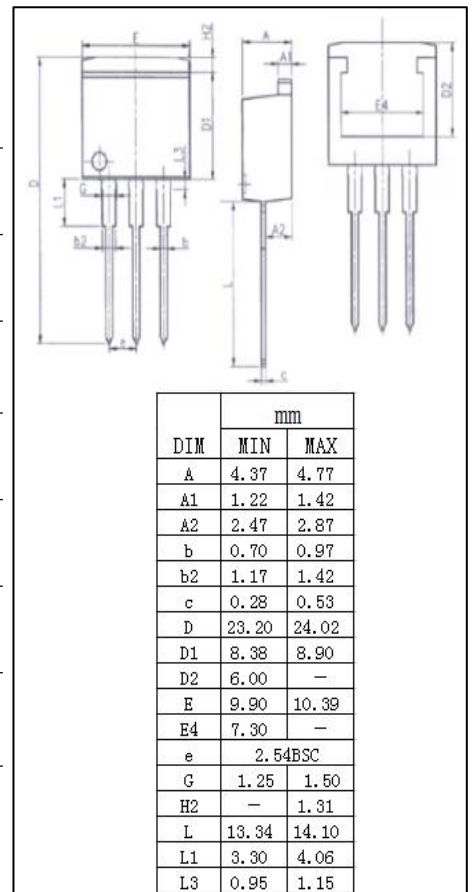
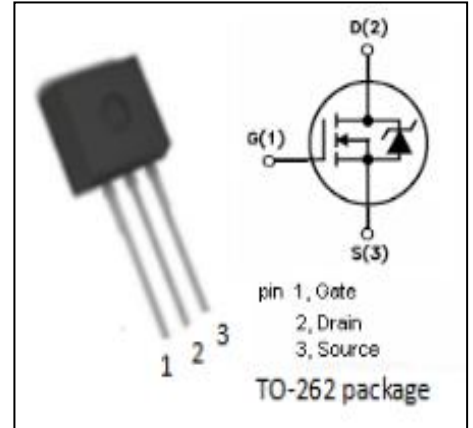
- Power supply
- Switching applications

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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{DS}$	Drain-Source Voltage	200	V
$V_{GS}$	Gate-Source Voltage	$\pm 20$	V
$I_D$	Drain Current-Continuous	18	A
$P_D$	Total Dissipation @ $T_c=25^{\circ}\text{C}$	100	W
$T_j$	Max. Operating Junction Temperature	-55~175	$^{\circ}\text{C}$
$T_{stg}$	Storage Temperature	-55~175	$^{\circ}\text{C}$

**• THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
$R_{th(j-c)}$	Channel-to-case thermal resistance	1.43	$^{\circ}\text{C}/\text{W}$



**Isc N-Channel MOSFET Transistor****IRFSL4020PBF****ELECTRICAL CHARACTERISTICS** $T_C=25^{\circ}\text{C}$  unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
$BV_{DSS}$	Drain-Source Breakdown Voltage	$V_{GS}=0V; I_D=250\mu A$	200			V
$V_{GS(th)}$	Gate Threshold Voltage	$V_{DS}=V_{GS}; I_D=100\mu A$	3		4.9	V
$R_{DS(on)}$	Drain-Source On-Resistance	$V_{GS}=10V; I_D=11A$		85	105	$m\Omega$
$I_{GSS}$	Gate-Source Leakage Current	$V_{GS}=\pm 20V; V_{DS}=0V$			$\pm 100$	nA
$I_{DSS}$	Drain-Source Leakage Current	$V_{DS}=200V; V_{GS}=0V$			20	$\mu A$
$V_{SD}$	Diode forward voltage	$I_S=11A, V_{GS}=0V$			1.3	V

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