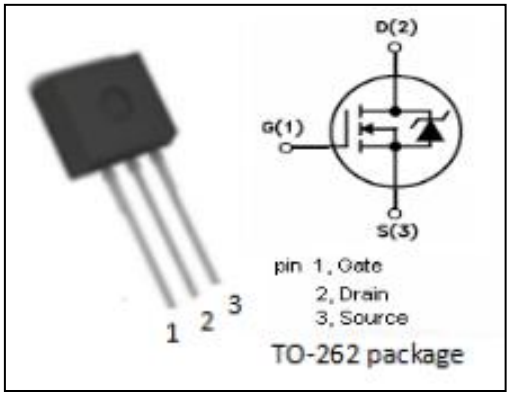
isc N-Channel MOSFET Transistor IRFZ24NLPbF

• **FEATURES**
• With TO-262(DPAK) packaging
• Surface mount
• High speed switching
• 100% avalanche tested
• Minimum Lot-to-Lot variations for robust device performance and reliable operationz



• **APPLICATIONS**
• Switching applications

• **ABSOLUTE MAXIMUM RATINGS(T_a=25℃)**

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage	55	V
V_{GSS}	Gate-Source Voltage	±20	V
I_D	Drain Current-Continuous@T_C=25℃ T_C=100℃	17 12	A
I_{DM}	Drain Current-Single Pulsed	68	A
P_D	Total Dissipation	45	W
T_j	Operating Junction Temperature	-55~175	℃
T_{stg}	Storage Temperature	-55~175	℃

• **THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
Rth(ch-c)	Channel-to-case thermal resistance	3.3	℃/W
Rth(ch-a)	Channel-to-ambient thermal resistance	40	℃/W

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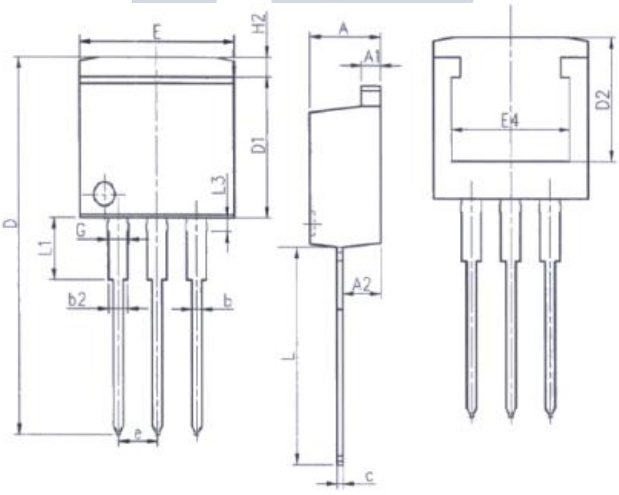
ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
BV_{DSS}	Drain-Source Breakdown Voltage	V_{GS}=0V; I_D= 0.25mA	55			V
$V_{GS(th)}$	Gate Threshold Voltage	V_{DS}=±20V; I_D=0.25mA	2		4	V
$R_{DS(on)}$	Drain-Source On-Resistance	V_{GS}= 10V; I_D=10A			70	mΩ
I_{GSS}	Gate-Source Leakage Current	V_{GS}= ±20V;V_{DS}= 0V			±0.1	μA
I_{DSS}	Drain-Source Leakage Current	V_{DS}= 55V; V_{GS}= 0V@Tc=25℃ Tc=125℃			20 250	μA
V_{SDF}	Diode forward voltage	I_{SD}=10A, V_{GS} = 0 V			1.3	V

DIMENSIONAL DRAWING



Unit: mm		
Symbol	Min.	Max.
A	4.37	4.77
A1	1.22	1.42
A2	2.47	2.87
b	0.70	0.97
b2	1.17	1.42
c	0.28	0.53
D	23.20	24.02
D1	8.38	8.90
D2	6.00	-

Unit: mm		
Symbol	Min.	Max.
E	9.90	10.39
E4	7.30	-
e	2.54BSC	
G	1.25	1.50
H2	-	1.31
L	13.34	14.10
L1	3.30	4.06
L3	0.95	1.15

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