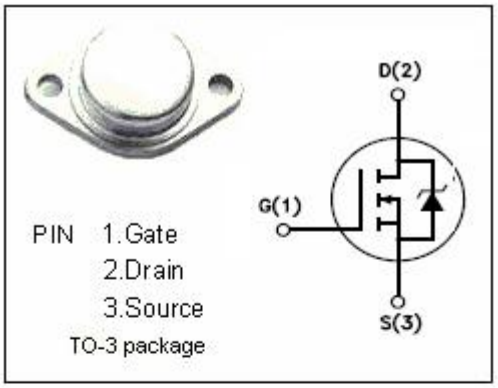
isc N-Channel Mosfet Transistor FRM230

- **FEATURES**
- 8A, 200V, RDS(on) = 0.5Ω
- Second Generation Rad Hard MOSFET Results From New Design Concepts
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



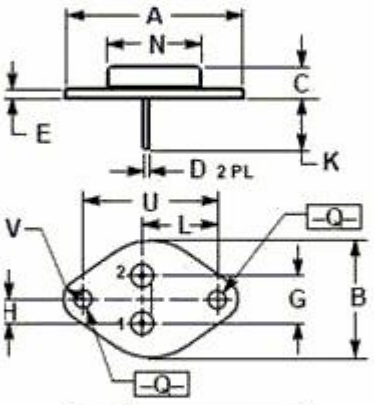
- **DESCRITION**

It is specially designed and processed to exhibit minimal characteristic changes to total dose and neutron exposures.

Design and processing efforts are also directed to enhance survival to heavy ion (SEE) and/or dose rate(GAMMA DOT) exposure

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

SYMBOL	ARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage (V_{GS}=0)	200	V
V_{GS}	Gate-Source Voltage	±20	V
I_D	Drain Current-continuous@ TC=25℃	8	A
	Drain Current-continuous@ TC=100℃	5	A
I_{DM}	Drain Current-Single Plused	24	A
P_{tot}	Total Dissipation@TC=25℃	75	W
T_j	Max. Operating Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55~150	℃



DIM	mm MIN	MAX
A	39.00	
B	25.30	26.67
C	7.80	8.30
D	0.90	1.10
E	1.40	1.60
G	10.92	
H	5.46	
K	11.40	13.50
L	16.75	17.05
N	19.40	19.62
Q	4.00	4.20
U	30.00	30.20
V	4.30	4.50

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance,Junction to Case	1.67	℃/W
Rth j-a	Thermal Resistance,Junction to Ambient	60	℃/W

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYPE	MAX	UNIT
$V_{(BR)DSS}$	Drain-Source Breakdown Voltage	V_{GS}=0; I_D=1mA	200			V
$V_{GS(TH)}$	Gate Threshold Voltage	V_{DS}= V_{GS}; I_D=1mA	2.0		4.0	V
$R_{DS(ON)}$	Drain-Source On-stage Resistance	V_{GS}=10V; I_D=5A			0.5	Ω
I_{GSS}	Gate Source Leakage Current	V_{GS}=±20V;V_{DS}=0			±100	nA
I_{DSS}	Zero Gate Voltage Drain Current	V_{DS}=200V; V_{GS}=0			25	μA
V_{SD}	Diode Forward Voltage	I_S=8A; V_{GS}=0			1.8	V
$t_{d(on)}$	Turn-on Delay Time	I_D=8A; V_{DD}=100V; R_{GS}=25Ω			30	ns
t_r	Rise Time				130	
$t_{d(off)}$	Turn-off Delay Time				150	
t_f	Fall Time				80	

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