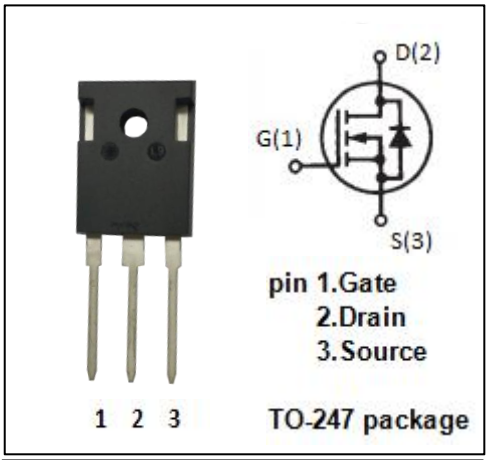
isc N-Channel MOSFET Transistor SPW55N80C3

FEATURES

- Drain Current : I_D= 54.9A@ T_C=25℃
- Drain Source Voltage
  : V_{DSS}= 800V(Min)
- Static Drain-Source On-Resistance
  : $R_{DS(on)}$ = 85mΩ(Max) @ V_{GS}= 10V
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



DESCRITION

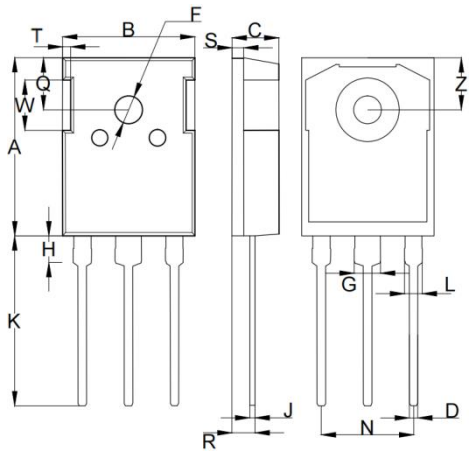
- motor drive, DC-DC converter, power switch and solenoid drive.

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage	800	V
V_{GS}	Gate-Source Voltage	±25	V
I_D	Drain Current-Continuous	54.9	A
I_{DM}	Drain Current-Single Pulsed	150	A
P_D	Total Dissipation @T_C=25℃	500	W
T_j	Max. Operating Junction Temperature	150	℃
T_{stg}	Storage Temperature	-55~150	℃

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th(J-c)}$	Junction-to-case thermal resistance	0.25	℃/W



DIM	mm	
	MIN	MAX
A	19.80	21.50
B	15.40	15.90
C	4.70	5.30
D	0.90	1.26
F	3.50	3.90
G	2.70	3.30
H	3.90	4.10
J	0.500	0.700
K	19.50	20.50
L	1.90	2.20
N	10.80	11.00
Q	6.00	6.30
R	2.90	3.30
S	1.80	2.20
T	2.15	2.35
W	4.90	5.10
Z	6.00	6.30

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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	800	-	-	V
$V_{GS(th)}$	Gate Threshold Voltage	V_{DS}=V_{GS}; I_D =3.3mA	2.1	-	3.9	V
$R_{DS(on)}$	Drain-Source On-Resistance	V_{GS}=10V; I_D=32.6A	-	-	85	mΩ
I_{GSS}	Gate-Source Leakage Current	V_{GS}=±20V	-	-	±100	nA
I_{DSS}	Drain-Source Leakage Current	V_{DS}= 800V; V_{GS}= 0V	-	-	25	μA
V_{SD}	Diode forward voltage	I_S= 54.9A, V_{GS} = 0V	-	0.95	-	V