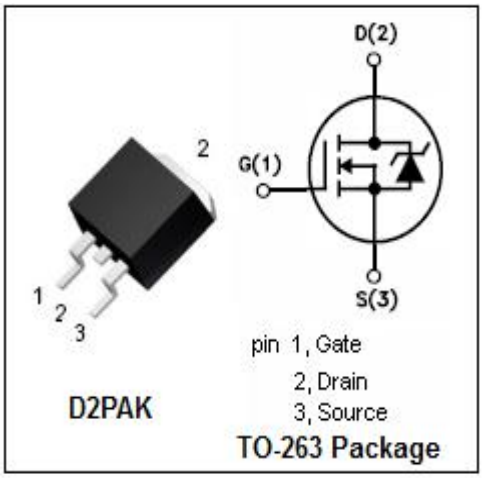
Isc N-Channel MOSFET Transistor IXTA1N100P

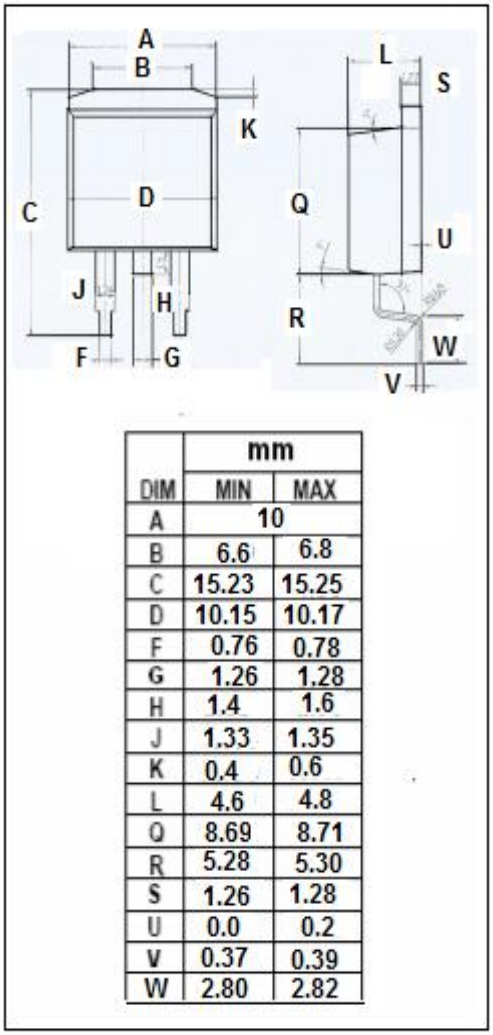


• FEATURES

- With To-263(D2PAK) package
- Low input capacitance and gate charge
- Low gate input resistance
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

• APPLICATIONS

- Switching applications



DIM	mm MIN	MAX
A	10	
B	6.6	6.8
C	15.23	15.25
D	10.15	10.17
F	0.76	0.78
G	1.26	1.28
H	1.4	1.6
J	1.33	1.35
K	0.4	0.6
L	4.6	4.8
Q	8.69	8.71
R	5.28	5.30
S	1.26	1.28
U	0.0	0.2
V	0.37	0.39
W	2.80	2.82

• ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage	1000	V
V_{GSS}	Gate-Source Voltage	±20	V
I_D	Drain Current-Continuous	1.0	A
I_{DM}	Drain Current-Single Pulsed	1.8	A
P_D	Total Dissipation	50	W
Tj	Max. Operating Junction Temperature	150	℃
T_{stg}	Storage Temperature	-55~150	℃

• THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
Rth(ch-c)	Channel-to-case thermal resistance	0.65	℃/W
Rth(ch-a)	Channel-to-ambient thermal resistance	60	℃/W

Isc N-Channel MOSFET Transistor IXTA1N100P

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	1000			V
$V_{GS(th)}$	Gate Threshold Voltage	V_{DS}= ±20V; I_D=0.05mA	2.5		4.5	V
$R_{DS(on)}$	Drain-Source On-Resistance	V_{GS}= 10V; I_D=0.5A		12.2	15	Ω
I_{GSS}	Gate-Source Leakage Current	V_{GS}= ±20V;V_{DS}= 0V			±0.05	μA
I_{DSS}	Drain-Source Leakage Current	V_{DS}= 1000V; V_{GS}= 0V;T_J=25℃ T_J=125℃			5 100	μA
V_{SDF}	Diode forward voltage	I_{SD}=1A, V_{GS} = 0 V			1.5	V