

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

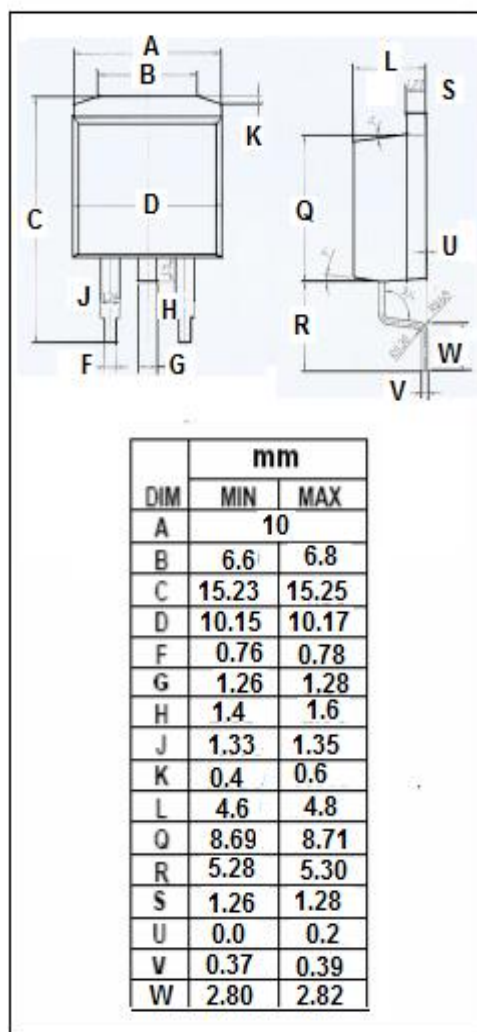
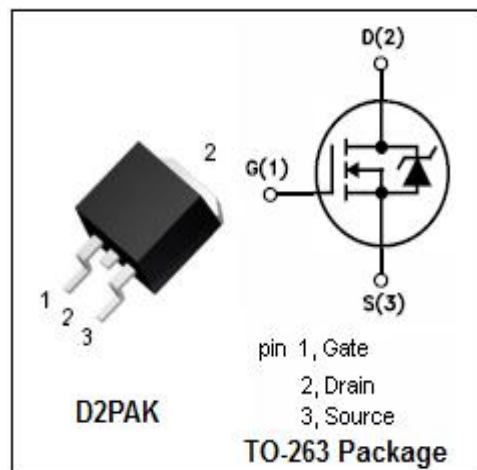
- Switching applications

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

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
T_j	Max. Operating Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature	-55~150	$^{\circ}\text{C}$

• THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th(ch-c)}$	Channel-to-case thermal resistance	0.65	$^{\circ}\text{C/W}$
$R_{th(ch-a)}$	Channel-to-ambient thermal resistance	60	$^{\circ}\text{C/W}$



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ELECTRICAL CHARACTERISTICS

$T_C=25^{\circ}\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
BV_{DSS}	Drain-Source Breakdown Voltage	$V_{GS}=0V; I_D=0.25mA$	1000			V
$V_{GS(th)}$	Gate Threshold Voltage	$V_{DS}= \pm 20V; I_D=0.05mA$	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	$V_{GS}= \pm 20V; V_{DS}= 0V$			± 0.05	μA
I_{DSS}	Drain-Source Leakage Current	$V_{DS}= 1000V; V_{GS}= 0V; T_J=25^{\circ}\text{C}$ $T_J=125^{\circ}\text{C}$			5 100	μA
V_{SDF}	Diode forward voltage	$I_{SD}=1A, V_{GS}= 0V$			1.5	V

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