

isc P-Channel MOSFET Transistor

IXTQ52P10P

• FEATURES

- Drain Source Voltage-
: $V_{DS} = -100V(\text{Min})$
- Static Drain-Source On-Resistance
: $R_{DS(on)} \leq 50m\Omega @ V_{GS} = -10V$
- Fast Switching
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

• APPLICATIONS

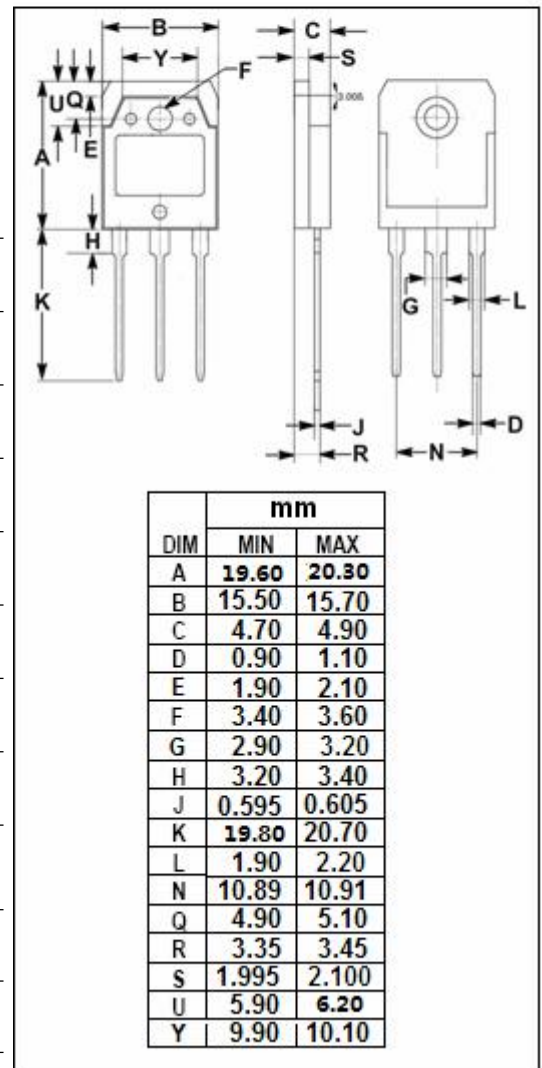
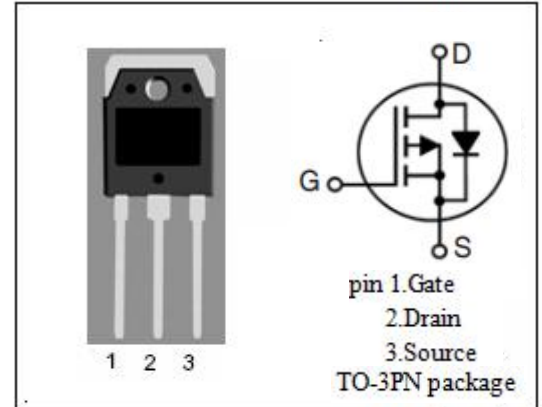
- Easy to Mount
- Space Savings
- High Power Density

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{DS}	Drain-Source Voltage	-100	V
V_{GS}	Gate-Source Voltage-Continuous	± 20	V
I_D	Drain Current-Continuous	-52	A
I_{DM}	Drain Current-Single Plused	-130	A
P_D	Total Dissipation @ $T_c = 25^\circ C$	300	W
T_j	Max. Operating Junction Temperature	-55~150	$^\circ C$
T_{stg}	Storage Temperature	-55~150	$^\circ C$

• THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th j-c}$	Thermal Resistance, Junction to Case	0.42	$^\circ C/W$



isc P-Channel MOSFET Transistor**IXTQ52P10P****• ELECTRICAL CHARACTERISTICS** $T_c=25^{\circ}\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYPE	MAX	UNIT
$V_{(BR)DSS}$	Drain-Source Breakdown Voltage	$V_{GS}=0; I_D=-250\mu\text{A}$	-100			V
$V_{GS(th)}$	Gate Threshold Voltage	$V_{DS}=V_{GS}; I_D=-250\mu\text{A}$	-2		-4	V
$R_{DS(on)}$	Drain-Source On-Resistance	$V_{GS}=-10\text{V}; I_D=-26\text{A}$			50	m Ω
I_{GSS}	Gate-Body Leakage Current	$V_{GS}=\pm 20\text{V}; V_{DS}=0$			± 100	nA
I_{DSS}	Zero Gate Voltage Drain Current	$V_{DS}=-100\text{V}; V_{GS}=0$ $V_{DS}=-100\text{V}; V_{GS}=0; T_J=125^{\circ}\text{C}$			-10 -150	μA
V_{SD}	Diode Forward On-voltage	$I_F=-26\text{A}; V_{GS}=0$			-3.5	V

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