

isc P-Channel MOSFET Transistor

IXTA24P085T

• FEATURES

- Static drain-source on-resistance:
 $R_{DS(on)} \leq 65\text{m}\Omega$
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

• APPLICATION

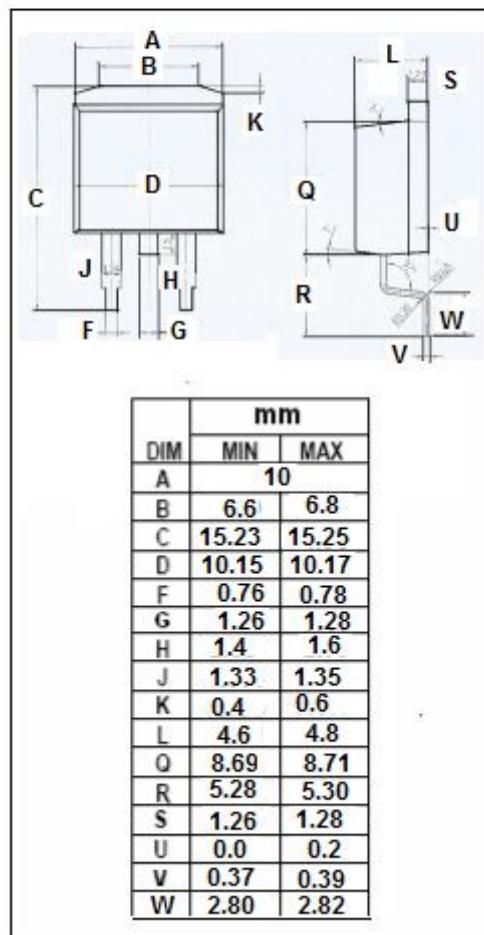
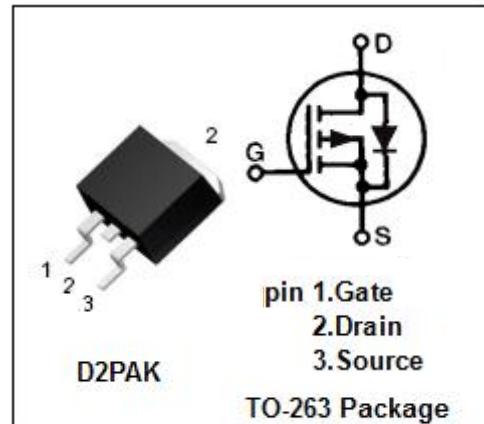
- High side switching
- Current regulators
- Automatic test equipment

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage	-85	V
V_{GS}	Gate-Source Voltage	± 15	V
I_D	Drain Current-Continuous	-24	A
I_{DM}	Drain Current-Single Pulsed	-80	A
P_D	Total Dissipation @ $T_c=25^\circ\text{C}$	83	W
T_j	Operating Junction Temperature	-55~150	°C
T_{stg}	Storage Temperature	-55~150	°C

• THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th(j-c)}$	Channel-to-case thermal resistance	1.5	°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	$\text{V}_{\text{GS}}=0\text{V}; \text{I}_D = -250 \mu\text{A}$	-85			V
$\text{V}_{\text{GS(th)}}$	Gate Threshold Voltage	$\text{V}_{\text{DS}}=\text{V}_{\text{GS}}; \text{I}_D = -250 \mu\text{A}$	-2.5		-4.5	V
$\text{R}_{\text{DS(on)}}$	Drain-Source On-Resistance	$\text{V}_{\text{GS}}= -10\text{V}; \text{I}_D = -12\text{A}$			65	$\text{m}\Omega$
I_{GSS}	Gate-Source Leakage Current	$\text{V}_{\text{GS}}= \pm 15\text{V}$			± 50	nA
I_{DSS}	Drain-Source Leakage Current	$\text{V}_{\text{DS}}= \text{V}_{\text{DSS}}; \text{V}_{\text{GS}}= 0\text{V}$			-3	μA
		$\text{V}_{\text{DS}}= \text{V}_{\text{DSS}}; \text{V}_{\text{GS}}= 0\text{V}; \text{T}_J=125^\circ\text{C}$			-100	
V_{SD}	Diode forward voltage	$\text{I}_F = -24\text{A}; \text{V}_{\text{GS}} = 0\text{V}$			-1.5	V

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