TIGER ELECTRONIC CO.,LTD

Product specification

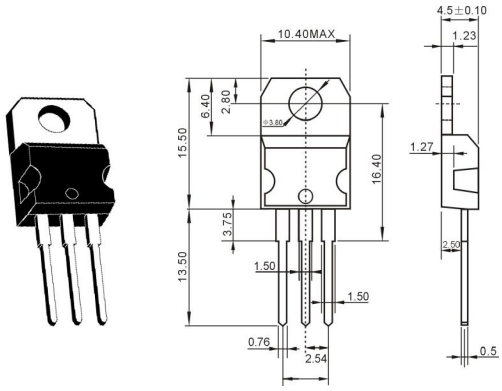
N-Channel Power MOSFET — IRFZ44N

DESCRIPTION

Process has specifically been designed to minimize input capacitance and gate charge. It is therefore suitable as primary switch in advanced highefficiency, high-frequency isolated DC-DC converters for Telecom and Computer applications. It is also intended for any applications with low gate drive requirements.

ABSOLUTE MAXIMUM RATINGS (Ta = 25 °C)

Parameter	I	Value	Unit
Drain-Source Voltage	V_{DSS}	55	V
Drain Current - Continuous	I_D	49	A
Drain Current - Pulsed	I_{DM}	160	A
Gate-Source Voltage	V_{GSS}	±20	V
Power Dissipation	P_D	94	W
Max. Operating Junction Temperature	T_j	150	°C
Storage Temperature	T_{stg}	-55~150	°C



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ELECTRICAL CHARACTERISTICS (Ta = 25 °C)

Parameter	Symbol	Test Conditions	Min.	Typ.	Max.	Unit
Drain-Source Breakdown Voltage	BV_{DSS}	V_{GS} = 0V, I_D =250 μ A	55	—	—	V
Zero Gate Voltage Drain Current	I_{DSS}	V_{DS} =55V, V_{GS} =0V	—	—	10	uA
Gate-Body Leakage Current, Forward	I_{GSSF}	V_{GS} =20V, V_{DS} =0V	—	—	100	nA
Gate-Body Leakage Current, Reverse	I_{GSSR}	V_{GS} = -20V, V_{DS} =0V	—	—	-100	nA
Gate Threshold Voltage	$V_{GS(th)}$	V_{DS} = V_{GS} , I_D =250 μ A	2.0	3.0	4.0	V
Static Drain-Source On-Resistance	$R_{DS(on)}$	V_{GS} = 10 V, I_D = 25 A	—	—	0.0175	Ω
Drain-Source Diode Forward Voltage	V_{SD}	V_{GS} = 0 V, I_S = 25 A	—	—	1.3	V