IFN6449, IFN6450

N-Channel Silicon Junction Field-Effect Transistor

- High Voltage

Absolute maximum ratings at T_A = 25°C

	IFN6449	IFN6450
Reverse Gate Source Voltage	– 100 V	– 100 V
Reverse Gate Drain Voltage	– 300 V	– 200 V
Continuous Forward Gate Current	10 mA	10 mA
Continuous Device Power Dissipation	800 mW	800 mW
Power Derating	6.4 mW/°C	6.4 mW/°C

At 25°C free air temperature:		IFN6449		IFN6450		Process NJ42		
Static Electrical Characteristics		Min	Max	Min	Max	Unit	Test Conditions	
Gate Drain Breakdown Voltage	$V_{(BR)GDO}$	– 300		– 200		V	I_G = – 10 µA, I_S = ØA	
Gate Source Breakdown Voltage	$V_{(BR)GSO}$	– 100		– 100		V	I_G = – 10 µA, I_D = ØA	
Gate Reverse Current	I_{GSS}				– 100	nA	V_{GS} = – 80V, V_{DS} = ØV	
					– 100	µA	V_{GS} = – 80V, V_{DS} = ØV	T_A = 150°C
Gate Source Cutoff Voltage	$V_{GS(OFF)}$	– 2	– 15	– 2	– 15	V	V_{DS} = 30V, I_D = 4 nA	
Drain Saturation Current (Pulsed)	I_{DSS}	2	10	2	10	mA	V_{DS} = 30V, V_{GS} = ØV	
Dynamic Electrical Characteristics								
Common Source Forward Transfer Transmittance	$\lvert Y_{fs} \rvert$	0.5	3	0.5	3	mS	V_{DS} = 30V, V_{GS} = ØV	f = 1 kHz
Common Source Output Conductance	g_{os}		100		100	µS	V_{DS} = 30V, V_{GS} = ØV	f = 1 kHz
Common Source Input Capacitance	C_{iss}		10		10	pF	V_{DS} = 30V, V_{GS} = ØV	f = 1 MHz
Common Source Reverse Transfer Capacitance	C_{rss}		5		5	pF	V_{DS} = 30V, V_{GS} = ØV	f = 1 MHz

TO-39 Package
Dimensions in Inches (mm)

Pin Configuration
1 Source, 2 Drain, 3 Gate & Case

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