

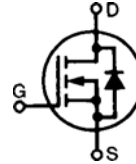
HiPerFET™ Power MOSFETs Q-Class

IXFH 28N50Q
IXFT 28N50Q

V_{DSS} = 500 V
I_{D25} = 28 A
R_{DS(on)} = 0.20 Ω

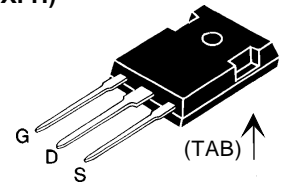
t_{rr} ≤ 250 ns

N-Channel Enhancement Mode
Avalanche Rated, Low Q_g, High dv/dt

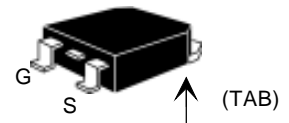


Symbol	Test Conditions	Maximum Ratings	
V _{DSS}	T _J = 25°C to 150°C	500	V
V _{DGR}	T _J = 25°C to 150°C; R _{GS} = 1 MΩ	500	V
V _{GS}	Continuous	±30	V
V _{GSM}	Transient	±40	V
I _{D25}	T _C = 25°C	28	A
I _{DM}	T _C = 25°C, pulse width limited by T _{JM}	112	A
I _{AR}	T _C = 25°C	28	A
E _{AR}	T _C = 25°C	50	mJ
E _{AS}		2.0	mJ
dv/dt	I _S ≤ I _{DM} , di/dt ≤ 100 A/∞s, V _{DD} ≤ V _{DSS} , T _J ≤ 150°C, R _G = 2 Ω	20	V/ns
P _D	T _C = 25°C	375	W
T _J		-55 to +150	°C
T _{JM}		150	°C
T _{stg}		-55 to +150	°C
T _L	1.6 mm (0.063 in) from case for 10 s	300	°C
M _d	Mounting torque	1.13/10	Nm/lb.in.
Weight	TO-247	6	g
	TO-268	4	g

TO-247 AD (IXFH)



TO-268 (D3) (IXFT)



G = Gate D = Drain
S = Source TAB = Drain

Features

- IXYS advanced low Q_g process
- Low gate charge and capacitances
 - easier to drive
 - faster switching
- International standard packages
- Low R_{DS(on)}
- Rated for unclamped Inductive load switching (UIS) rated
- Molding epoxies meet UL 94 V-0 flammability classification

Advantages

- Easy to mount
- Space savings
- High power density

Symbol	Test Conditions	Characteristic Values (T _J = 25°C, unless otherwise specified)		
		min.	typ.	max.
V _{DSS}	V _{GS} = 0 V, I _D = 250 ∞A	500		V
V _{GS(th)}	V _{DS} = V _{GS} , I _D = 4 mA	2.5		V
I _{GSS}	V _{GS} = ±30 V _{DC} , V _{DS} = 0			±100 nA
I _{DSS}	V _{DS} = V _{DSS} , T _J = 25°C V _{GS} = 0 V, T _J = 125°C			25 ∞A 1 mA
R _{DS(on)}	V _{GS} = 10 V, I _D = 0.5 I _{D25} Pulse test, t ≤ 300 ∞s, duty cycle d ≤ 2 %			0.20 Ω

