TO-220F N

N-CHANNEL MOSFET in a TO-220F Plastic Package.

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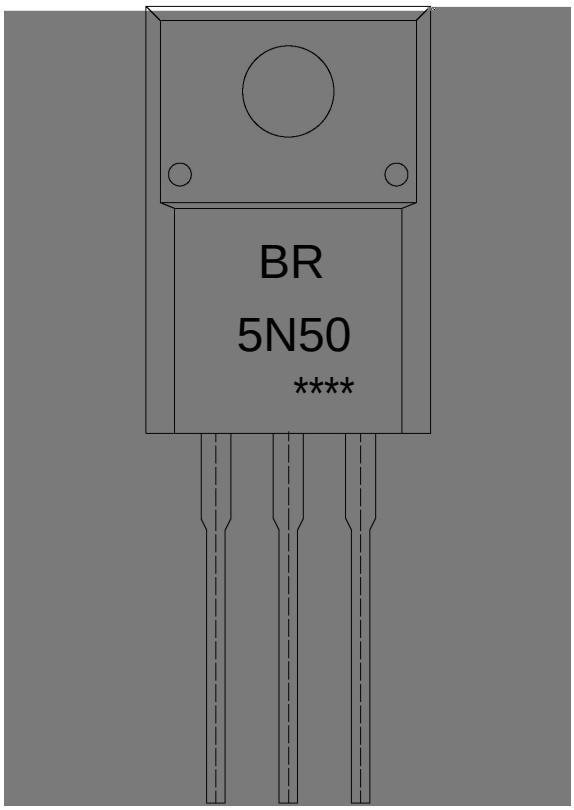
Low gate charge, low crss, fast switching.

DC/DC ,

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DSS}	650	V
Drain Current	I_D(Tc=25)	5	A
	I_D(Tc=100)	3.3	A
Drain Current - Pulsed	I_{DM}	16	A
Gate-Source Voltage	V_{GS}	±30	V
Single Pulsed Avalanche Energy(L=10mH)	E_{AS}	176	mJ
Avalanche Current	I_{AS}	6.3	A
Power Dissipation	P_D(Tc=25)	28	W
Operating and Storage Temperature Range	T_J,T_{STG}	-55 to 150	
Junction-to-Ambient	$R_{\theta JA}$	65	/W
Junction-to-Case	$R_{\theta JC}$	4.5	/W

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	BV_{DSS}	V_{GS}=0V I_D=250μA	650			V
Zero Gate Voltage Drain Current	I_{DSS}	V_{DS}=650V V_{GS}=0V			1.0	μA
Gate-Body Leakage Current, Forward	I_{GSS}	V_{GS}=±30V			±100	nA
Gate Threshold Voltage	$V_{GS(th)}$	V_{DS}=V_{GS} I_D=250μA	2	3.3	4	V
Static Drain-Source On-Resistance	$R_{DS(on)}$	V_{GS}=10V I_D=2.5A		1.35	1.5	Ω
Drain-Source Diode Forward Voltage	V_{SD}	V_{GS}=0V I_{SD}=1A T_J=25			1.2	V
Gate Resistance	R_g	V_{GS} = 0V f = 1.0MHz		4.1		Ω
Input Capacitance	C_{iss}	V_{DS}=25V V_{GS}=0V f=1.0MHz		585		pF
Output Capacitance	C_{oss}			190		pF
Reverse Transfer Capacitance	C_{rss}			23		pF
Turn-On Delay Time	$t_{d(on)}$	V_{DS}=250V I_D=5A R_G=25Ω V_{GS}=10V		15		ns
Turn-On Rise Time	t_r			32		ns
Turn-Off Delay Time	$t_{d(off)}$			35		ns
Turn-Off Fall Time	t_f			25		ns

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5N50

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Note:

BR:	Company Code
5N50:	Product Type
****:	Lot No. Code, code change with Lot No