

/ Descriptions

TO-252 N MOS N-CHANNEL MOSFET in a TO-252 Plastic Package.

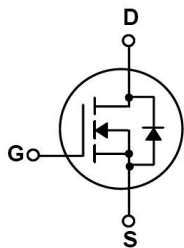
/ Features

Low gate charge, low crss, fast switching.

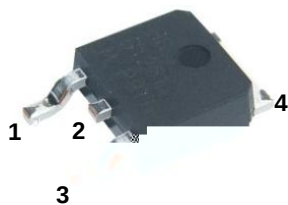
/ Applications

These devices are well suited for power switch circuit of adaptor and charger.

/ Equivalent Circuit



/ Pinning



PIN1 G PIN 2 D PIN 3 S PIN 4 D

/ h_{FE} Classifications & Marking

See Marking Instructions.

BRD4N70

/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Total Gate Charge	Q_g	$I_D=4.0A$ $V_{DS}=350V$ $V_{GS}=10V$		15		nC
Gate-to-Source Charge	Q_{gs}			3		nC
Gate-to-Drain Charge	Q_{gd}			6		nC
Continuous Diode Forward Current	I_S				4.0	A
Diode Forward Voltage	V_{SD}	$I_S=4.0A$ $V_{GS}=0V$ $T_j=25$			1.4	V
Reverse Recovery Time	t_{rr}	$I_f=4.0A$ $T_j=25$ $di/dt=100A/\mu s$		198		nS
Reverse Recovery Charge	Q_{rr}			770		uC

(Notes):

Repetitive rating: Pulse width limited by maximum junction temperature

$=25$, $V_{DD}=50V, L=30mH, R_G=25\Omega, I_{AS}=4.0A$

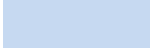
Starting $T_j=25$, $V_{DD}=50V, L=30mH, R_G=25\Omega, I_{AS}=4.0A$

$\leq 300\mu s$ ≤ 2

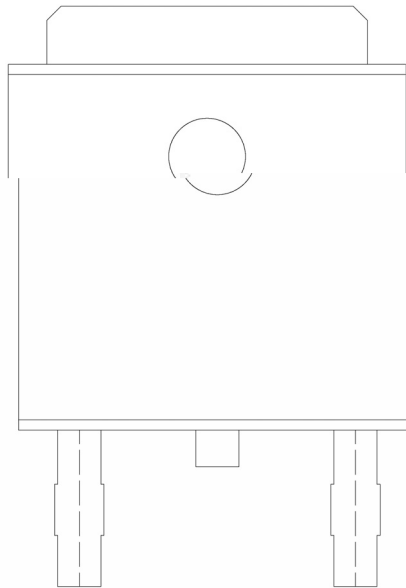
Pulse Test: Pulse width $\leq 300\mu s$, Duty cycle $\leq 2\%$

BRD4M

Rev.E May.



/ Marking Instructions



BR
4N70

Note:
BR:

BRD4N70

Rev.E May.-2016

(	
Temperature (°C)	3
	3
	2
	2
	1
	1

1	25	150
2	245±5	
3		

/	
260±5	

/ Packagi

/ REEL

Package Type	Units/Reel
TO-252	/

Package Typ
TO-251/252

