/ Descriptions

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

/ Features

, ,

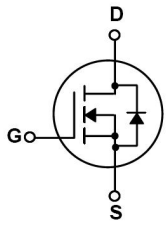
Low gate charge, low crss, fast switching.

/ Applications

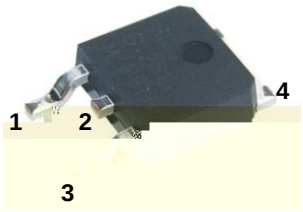
DC/DC

These devices are well suited for high efficiency switching DC/DC converters and switch mode power supplies.

/ Equivalent Circuit



/ Pinning



PIN1 G PIN 2 D PIN 3 S PIN 4 D

/ h_{FE} Classifications & Marking

See Marking Instructions.

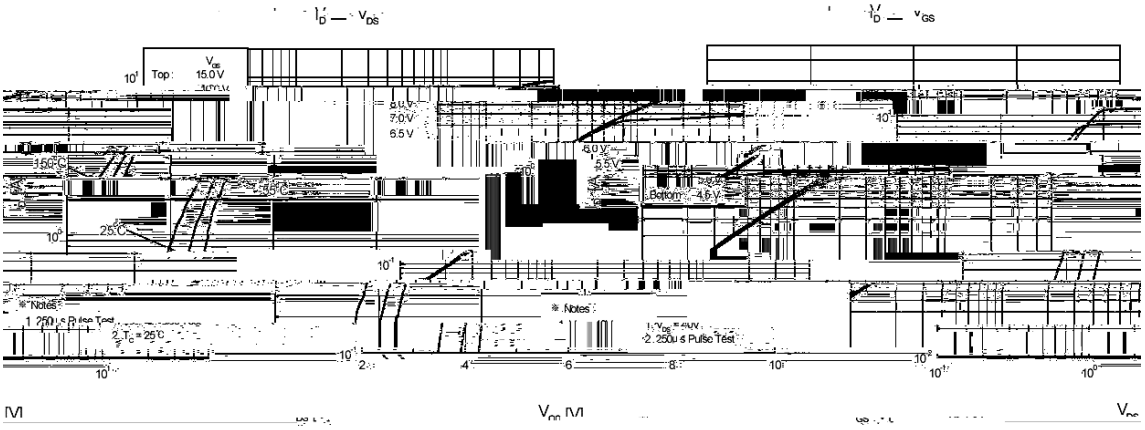
/ Absolute Maximum Ratings(Ta=25)

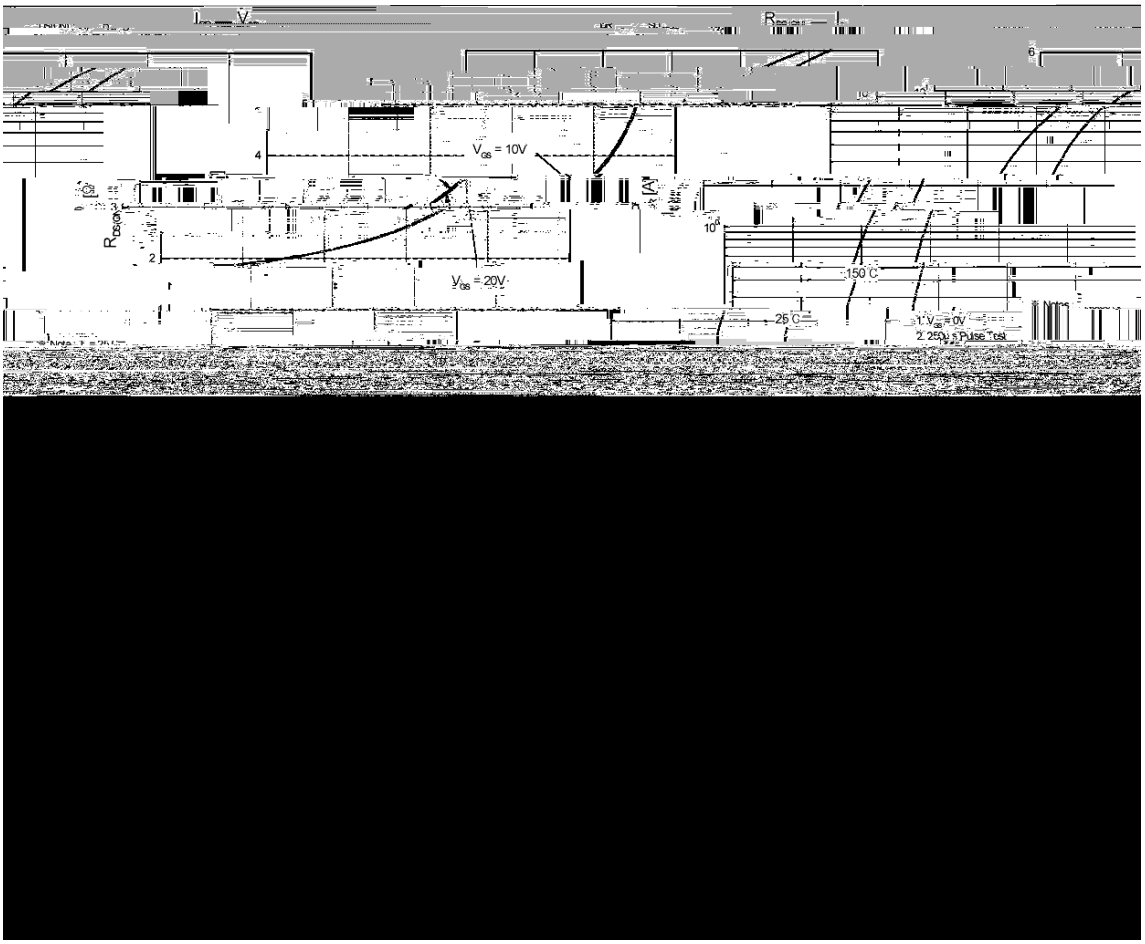
Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DSS}	600	V
Drain Current	I_D(Tc=25)	5.0	A
Drain Current	I_D(Tc=100)	2.6	A
Drain Current - Pulsed	I_{DM}	18	A
Gate-Source Voltage	V_{GSS}	±30	V
Single Pulsed Avalanche Energy	E_{AS}	210	mJ
Repetitive Avalanche Energy	E_{AR}	10	mJ
Avalanche Current	I_{AR}	4.5	A
Power Dissipation	P_D(Tc=25)	35	W
Operating and Storage Temperature Range	T_J,T_{STG}	-55 to 150	

/ Electrical Characteristics(Ta=25)

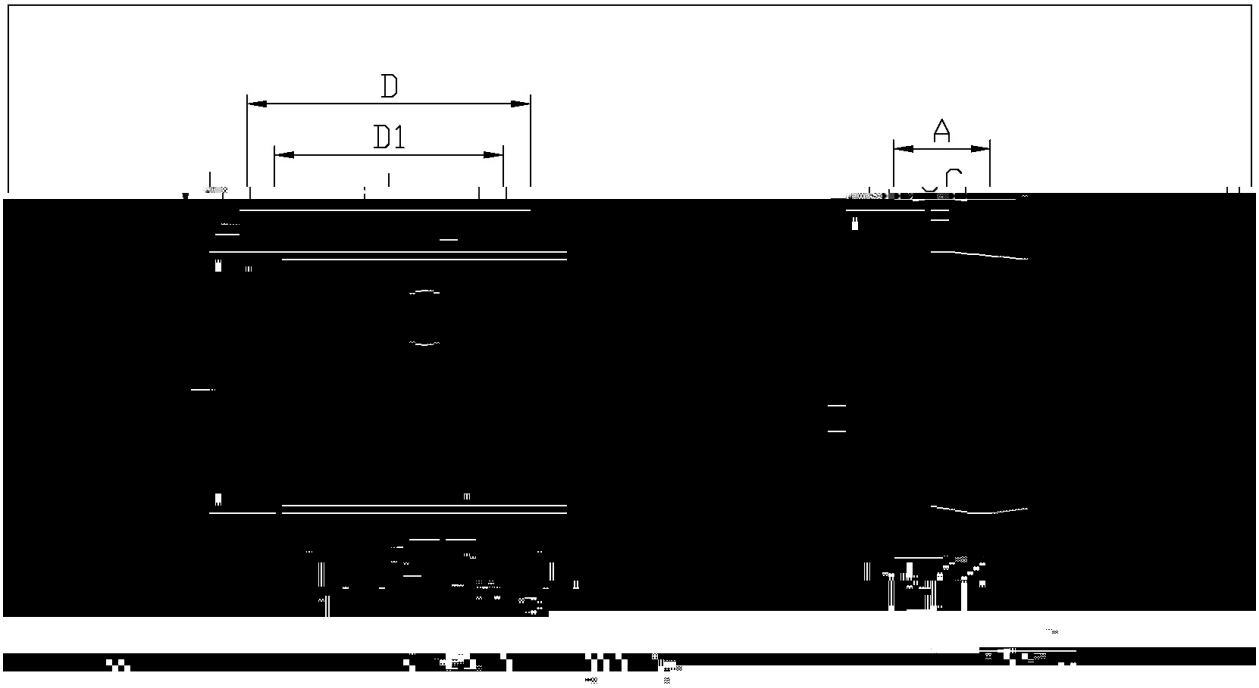
Parameter	Symbol	Test Conditions		Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	BV_{DSS}	V_{GS}=0V	I_D=250μA	600			V
Zero Gate Voltage Drain Current	I_{DSS}	V_{DS}=600V	V_{GS}=0V			1.0	μA
		V_{DS}=480V	T_C=125			10	μA
Gate-Body Leakage Current Forward	I_{GSS}	V_{GS}=±30V	V_{DS}=0V			±0.1	μA
Gate Threshold Voltage	$V_{GS(th)}$	V_{DS}=V_{GS}	I_D=250μA	2.0		4.0	V
Static Drain-Source On-Resistance	$R_{DS(on)}$	V_{GS}=10V	I_D=2.25A		2.0	2.5	Ω
Forward Transconductance	g_{FS}	V_{DS}=40V	I_D=2.25A		4.7		S
Drain-Source Diode Forward Voltage	V_{SD}	V_{GS}=0V	I_S=4.5A			1.4	V
Input Capacitance	C_{iss}	V_{DS}=25V f=1.0MHz	V_{GS}=0V		515	670	pF
Output Capacitance	C_{oss}				55	72	pF
Reverse Transfer Capacitance	C_{rss}				6.5	8.5	pF
Turn-On Delay Time	$t_{d(on)}$	V_{DD}=300V R_G=25Ω	I_D=4.5A		10	30	ns
Turn-On Rise Time	t_r				42	90	ns
Turn-Off Delay Time	$t_{d(off)}$				38	85	ns
Turn-Off Fall Time	t_f				46	100	ns

/ Electrical Characteristic Curve



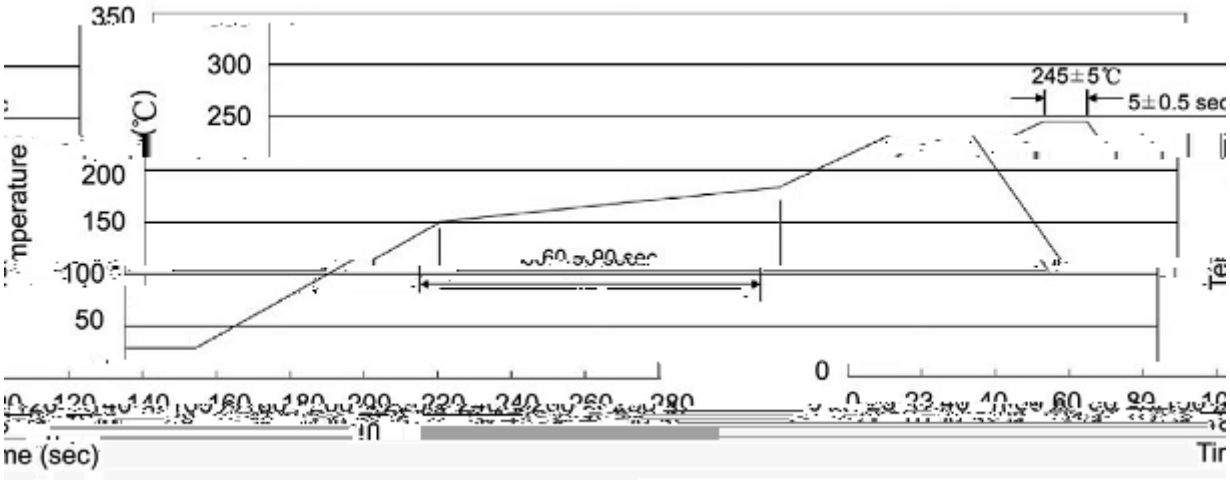


/ Package Dimensions



	0.90				
00	0.10	D1	5.10	5.50	K

TO-252



Note:

1 25 150 60 90sec;

1.Preheating:25~150 , Time:60~90sec.

Time:10±1 sec

/ REELPackage Type)
Units Dimensionmm(unit

Package Type
Units Dimensionmm(unit)

2 245±5

3