

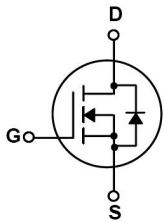
Rev.D May.-2016

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

Low gate charge, low crss, fast switching.

DC/DC

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

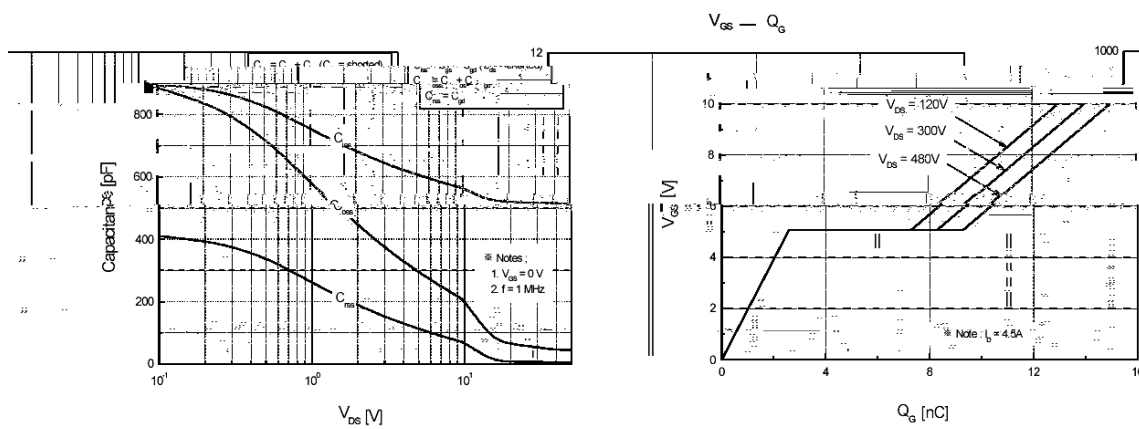
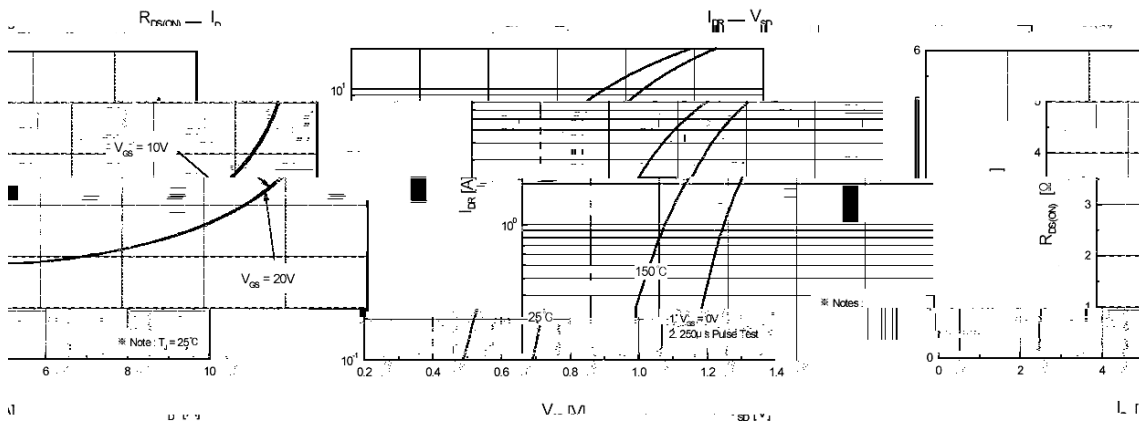
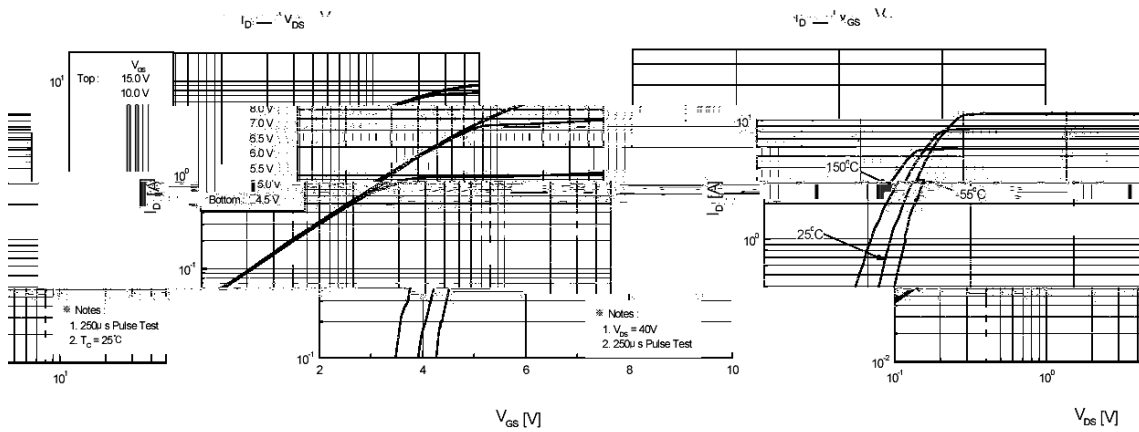


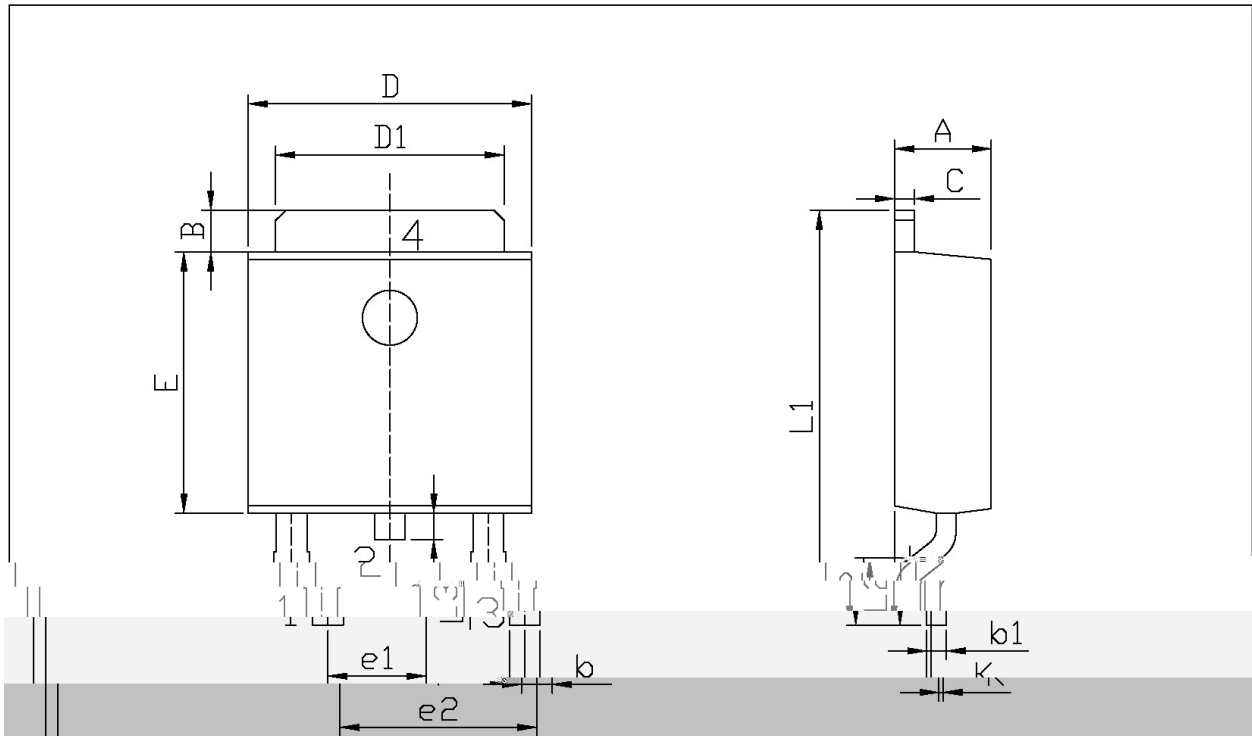
PIN1 G PIN 2 D PIN 3 S PIN 4 D

See Marking Instructions.

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DSS}	600	V
Drain Current	$I_D(T_C=25^\circ\text{C})$	5.0	A
Drain Current	$I_D(T_C=100^\circ\text{C})$	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	$P_D(T_C=25^\circ\text{C})$	35	W
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to 150	$^\circ\text{C}$

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	BV_{DSS}	$V_{GS}=0V$ $I_D=250\mu A$	600			V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS}=600V$ $V_{GS}=0V$			1.0	μA
		$V_{DS}=480V$ $T_C=125^\circ\text{C}$			10	μA
Gate-Body Leakage Current Forward	I_{GSS}	$V_{GS}=\pm 30V$ $V_{DS}=0V$			± 0.1	μA
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS}=V_{GS}$ $I_D=250\mu A$	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}	$V_{DS}=25V$ $V_{GS}=0V$ $f=1.0\text{MHz}$		515	670	pF
Output Capacitance	C_{oss}			55	72	pF
Reverse Transfer Capacitance	C_{rss}			6.5	8.5	pF
Turn-On Delay Time	$t_{d(on)}$		$V_{DD}=300V$ $I_D=4.5A$ $R_G=25\Omega$		10	30
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

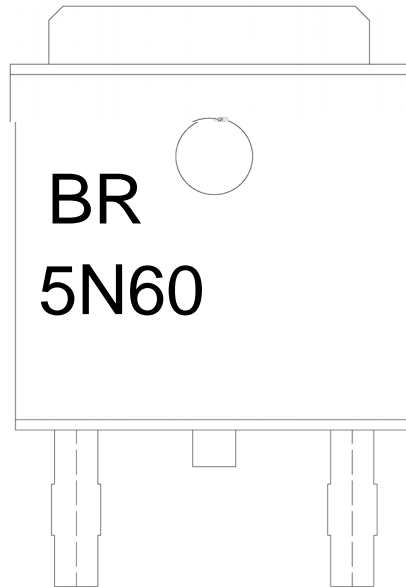




单位: mm

Symbol	Dimensions In Millimeters		Symbol	Dimensions In Millimeters	
	Min	Max		Min	Max
A	2.20	2.40	E	5.95	6.25
B	0.95	1.25	e1	2.24	2.34
b	0.50	0.70	e2	4.43	4.73
b1	0.45	0.55	L1	0.45	0.95
C	0.45	0.55	L2	1.25	1.75
D	6.45	6.75	L3	0.60	0.90
D1	5.10	5.50	K	0.00	0.10

T0-252



BR

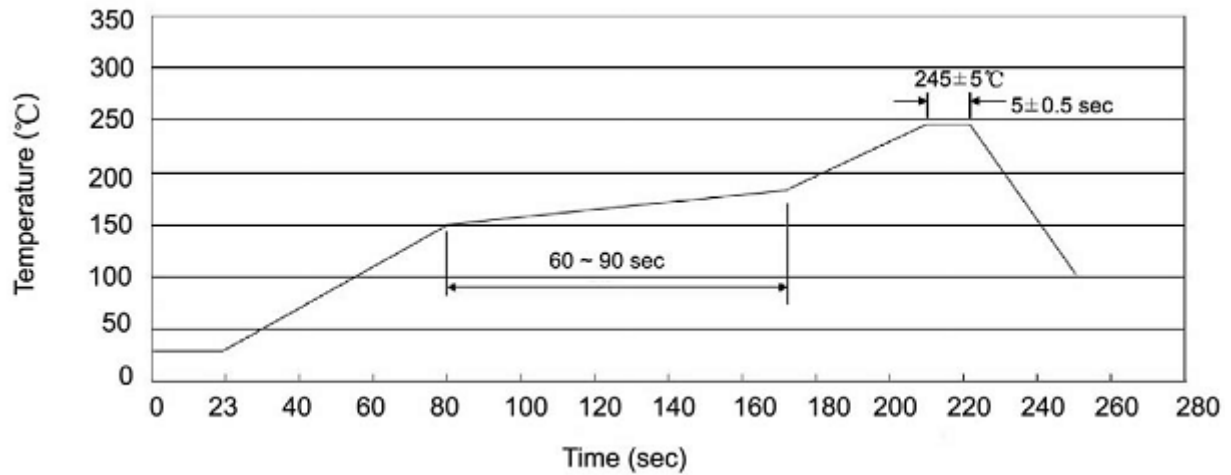
5N60

Note:

BR: Company Code

5N60: Product Type.

****: Lot No. Code, code change with Lot No.

Temperature Profile for IR Reflow Soldering(Pb-Free)

Note:

- | | | | | | |
|---|-------|-----|-------|--------|--|
| 1 | 25 | 150 | 60 | 90sec; | 1. Preheating: 25~150 , Time: 60~90sec. |
| 2 | 245±5 | | 5±0.5 | sec; | 2. Peak Temp.: 245±5 , Duration: 5±0.5sec. |
| 3 | | 2 | 10 | /sec. | 3. Cooling Speed: 2~10 /sec. |

260±5 10±1 sec. Temp.: 260±5°C Time: 10±1 sec

/ REEL

Package Type	Units				Dimension		(unit mm ³)

/ TUBE

Package Type	Units				Dimension		(unit mm ³)