

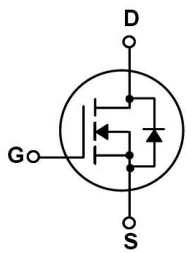
Rev.D Nov.-2015

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

DS dv/dt
Low $R_{DS(ON)}$, Low gate charge, Low C_{rss} , Fast switching, Improved dv/dt capability.

DC/DC

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

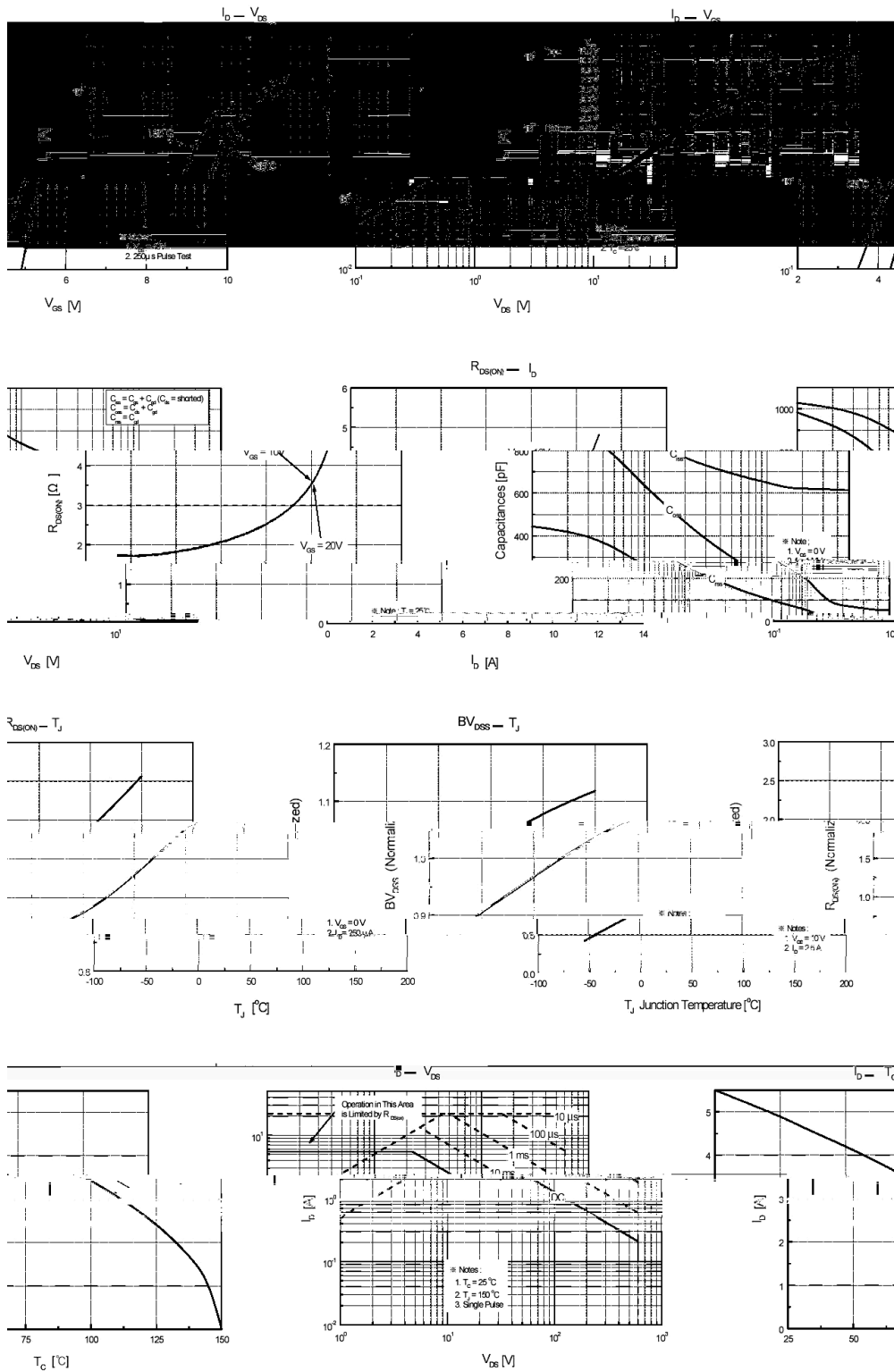


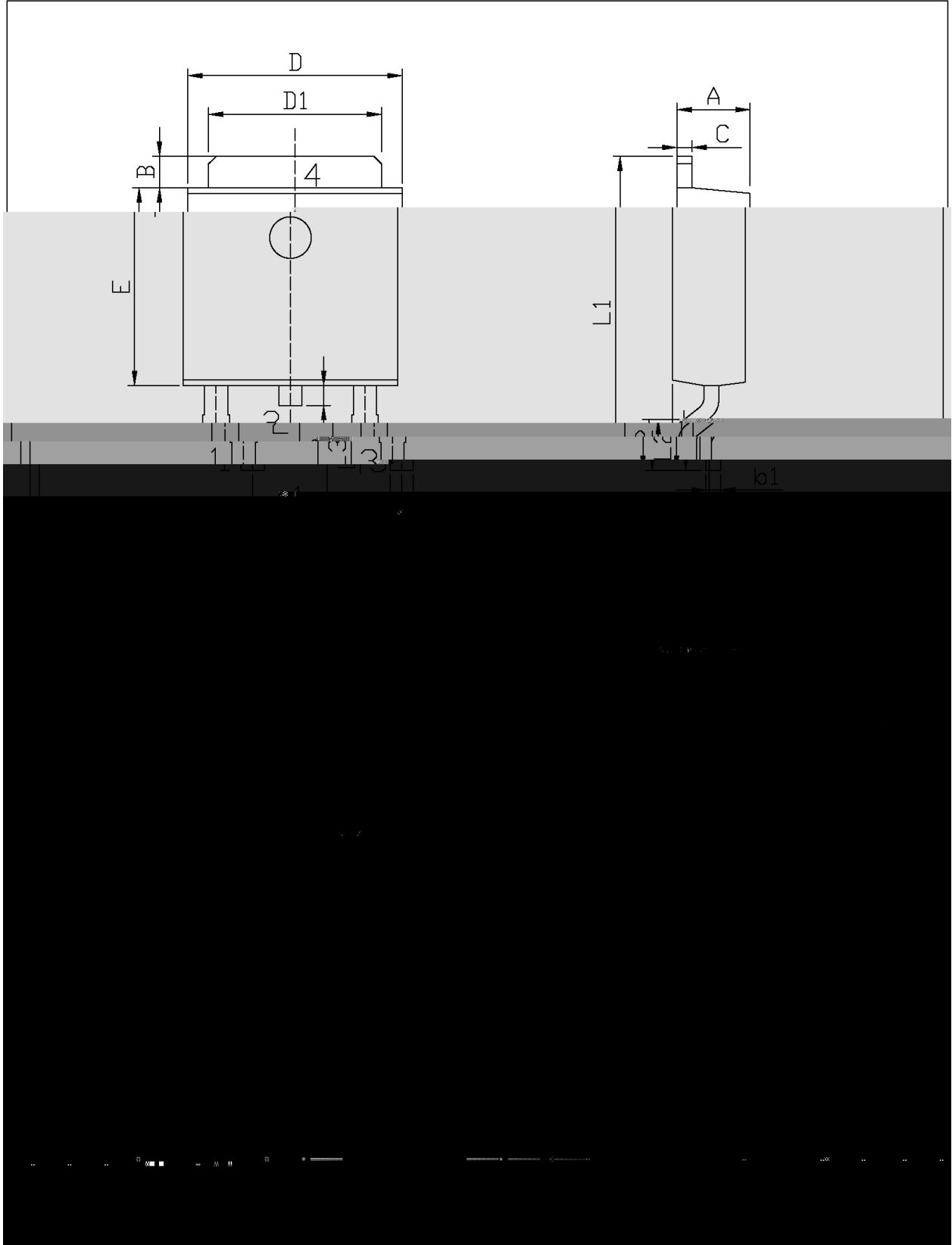
PIN 1 G PIN 2 D PIN 3 S PIN 4 D

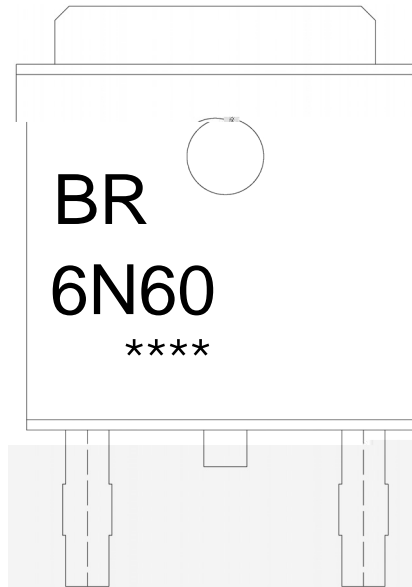
See Marking Instructions.

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DSS}	600	V
Drain Current	$I_D(T_C=25^\circ\text{C})$	5.5	A
Drain Current	$I_D(T_C=100^\circ\text{C})$	3.3	A
Drain Current - Pulsed	I_{DM}	22	A
Gate-Source Voltage	V_{GSS}	± 30	V
Single Pulsed Avalanche Energy	E_{AS}	300	mJ
Repetitive Avalanche Energy	E_{AR}	12.5	mJ
Avalanche Current	I_{AR}	5.5	A
Power Dissipation	$P_D(T_C=25^\circ\text{C})$	40	W
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to 150	

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	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	$R_{DS(on)}$	$V_{GS}=10V$ $I_D=2.75A$		1.7	2.0	Ω
Forward Transconductance	g_{FS}	$V_{DS}=40V$ $I_D=2.75A$		4.8		S
Drain-Source Diode Forward Voltage	V_{SD}	$V_{GS}=0V$ $I_S=5.5A$			1.4	V
Input Capacitance	C_{iss}	$V_{DS}=25V$ $V_{GS}=0V$ $f=1.0\text{MHz}$		620	810	pF
Output Capacitance	C_{oss}			65	85	
Reverse Transfer Capacitance	C_{rss}			7	10	
Turn-On Delay Time	$t_{d(on)}$		$V_{DD}=300V$ $I_D=5.5A$ $R_G=25\Omega$		15	
Turn-On Rise Time	t_r			45	100	
Turn-Off Delay Time	$t_{d(off)}$			45	100	
Turn-Off Fall Time	t_f			45	100	







BR

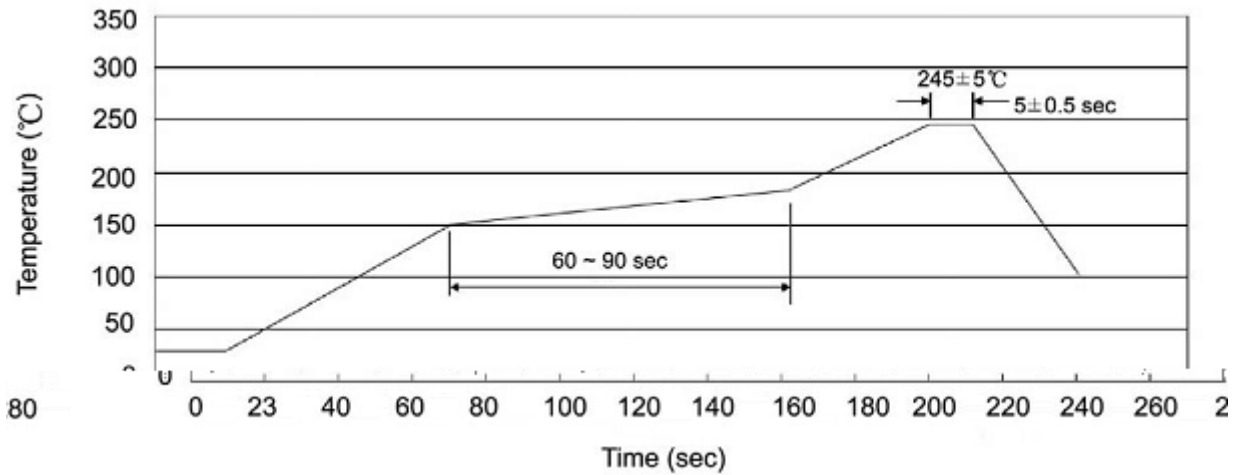
6N60

Note:

BR: Company Code

6N60: 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±0.5sec; | | 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

Time:10±1 sec

/ REEL

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	Units/Reel 只/卷盘	Reels/Inner Box 卷盘/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Reel	Inner Box 盒	Outer Box 箱
TO-252	2,500	2	5,000	6	30,000	13" ×16	360×360×50	380×335×366

/ TUBE

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	Units/Tube 只/套管	Tubes/Inner Box 套管/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Tube 套管	Inner Box 盒	Outer Box 箱
TO-251/252	75	48	3,600	5	18,000	526×20.5×5.25	555×164×50	575×290×180