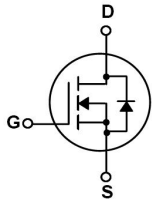


Rev.A Sep.-2017

TO-220FL N MOS N-CHANNEL MOSFET in a TO-220FL Plastic Package.

$R_{DS(on)}$ C_{rss}
 Low $R_{DS(on)}$, low gate charge, low C_{rss} , fast switching.

D
 Automotive DC Motor Control and Class D Amplifier.



PIN1 G PIN 2 D PIN 3 S

See Marking Instructions.

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Dynamic Characteristics						
Forward Transconductance	g_{fs}	$V_{DS}=15V, I_D=7.5A$		18		S
Input Capacitance	C_{iss}			2400		
Output Capacitance	C_{oss}					

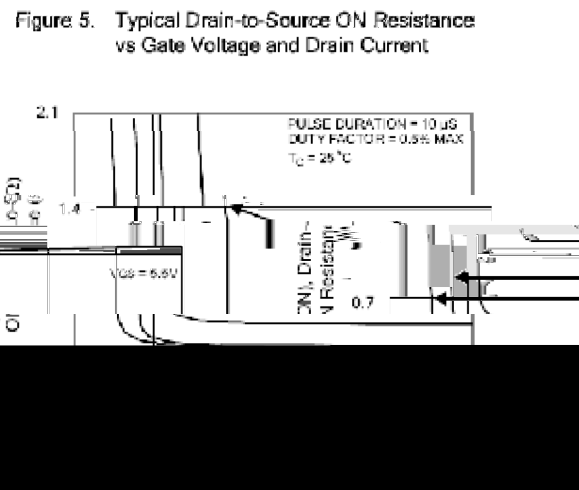
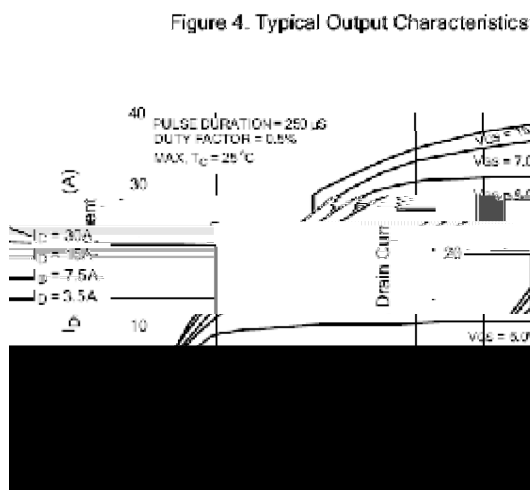
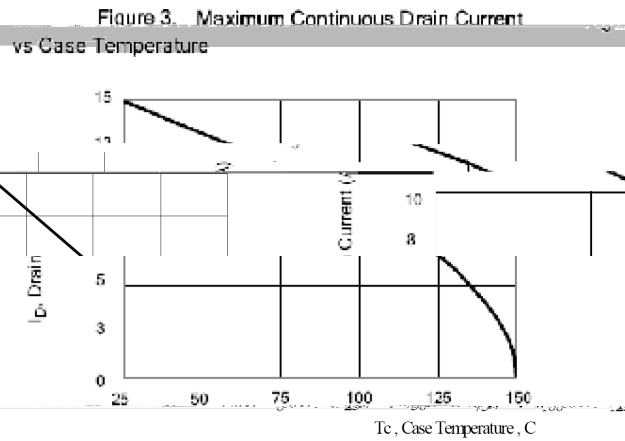
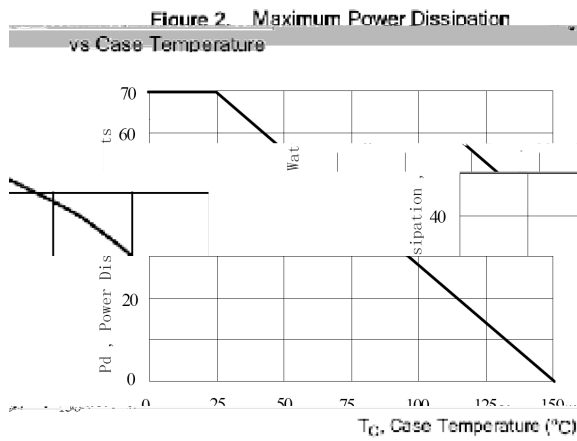
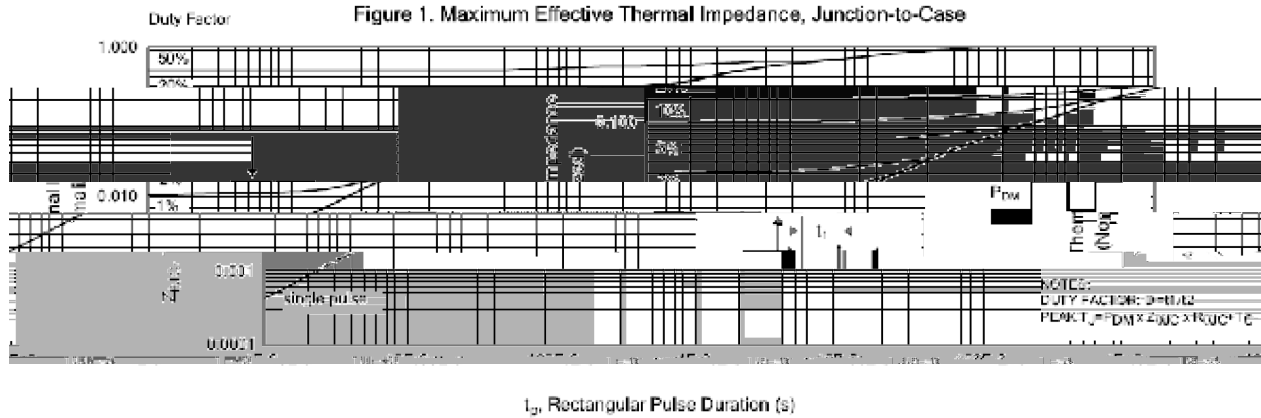


Figure 6. Maximum Peak Current Capability

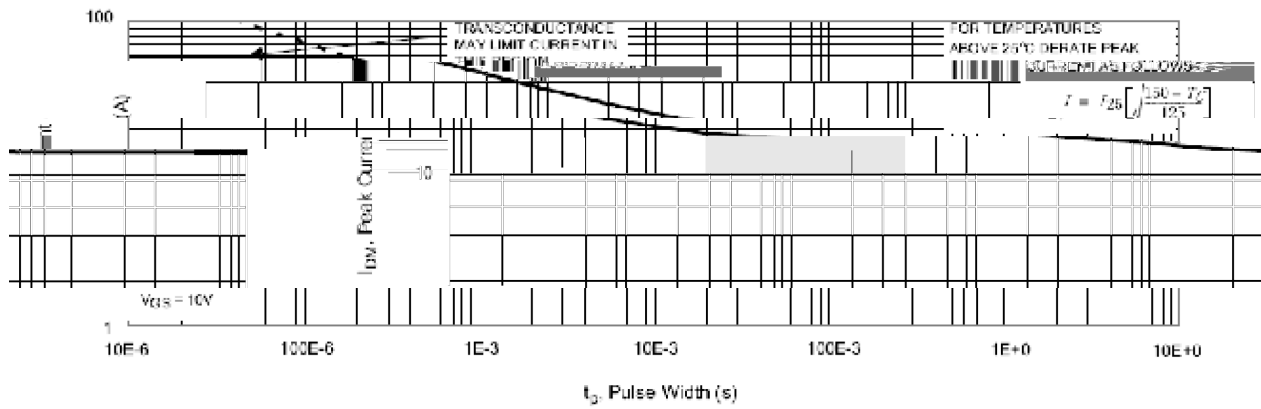
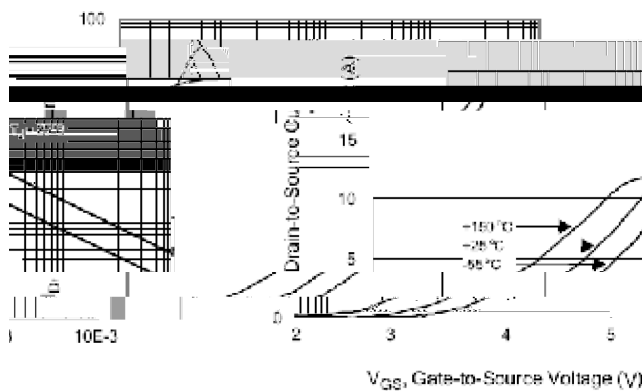

 Figure 7. Typical Transfer Characteristics
Switching Capability


Figure 8. Unclamped Inductive

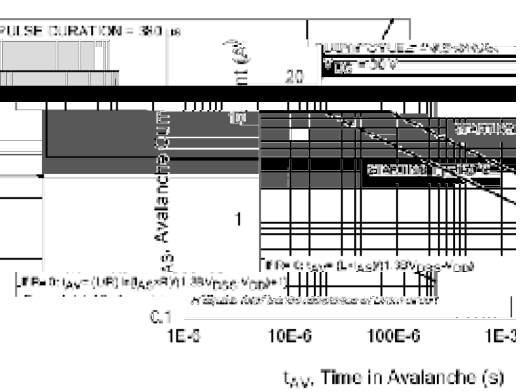


Figure 9. Typical Drain-to-Source ON-Resistance vs. Drain Current

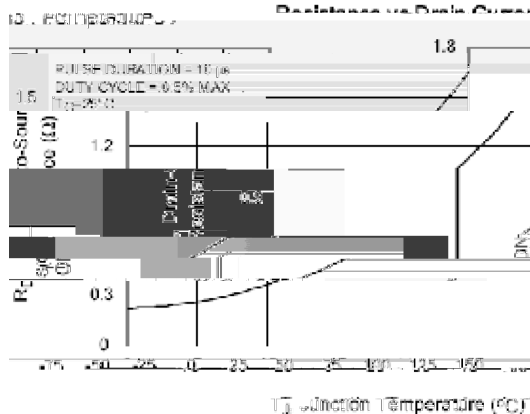


Figure 10. Typical Drain-to-Source ON-Resistance vs. Junction Temperature

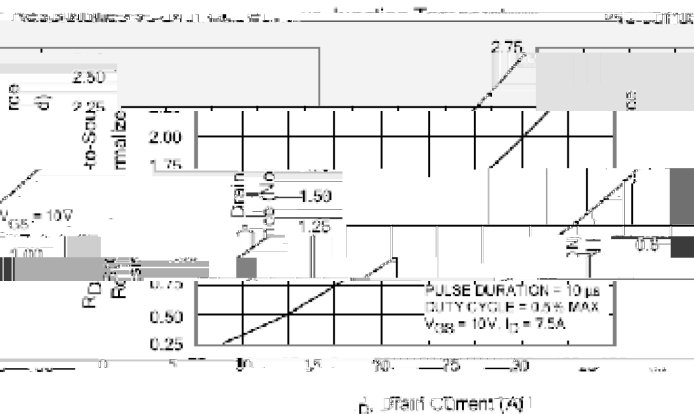


Figure 11. Typical Breakdown Voltage vs Junction Temperature

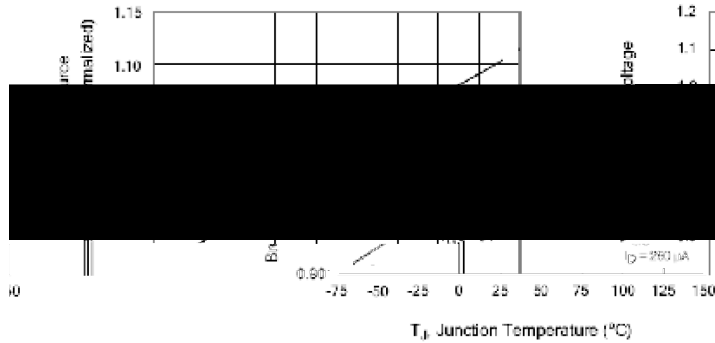


Figure 12. Typical Threshold Voltage vs Junction Temperature

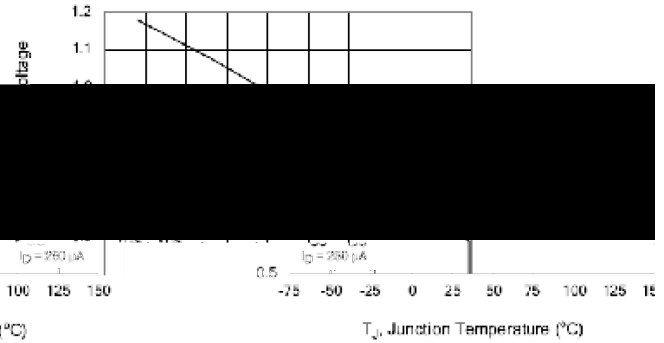


Figure 13. Maximum Forward Bias Safe Drain-to-Source Voltage

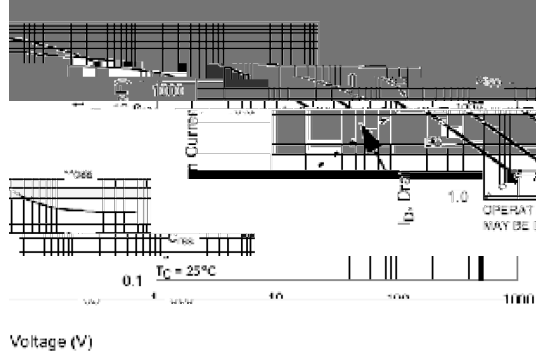


Figure 14. Typical Capacitance vs Operating Area

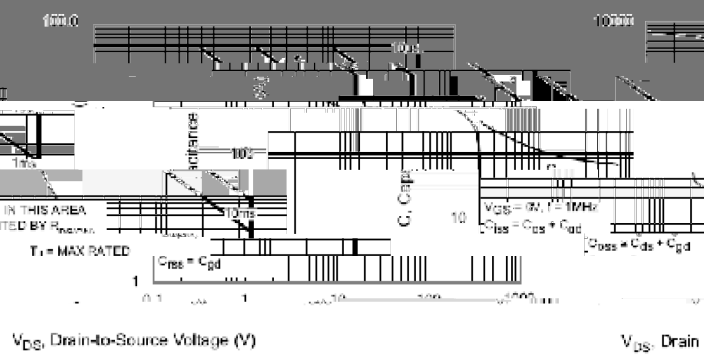


Figure 15. Typical Gate Charge Characteristics

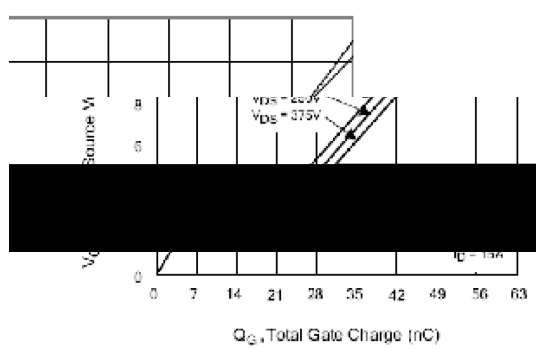
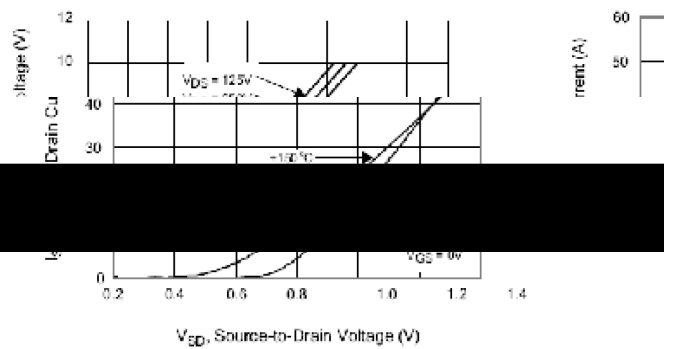
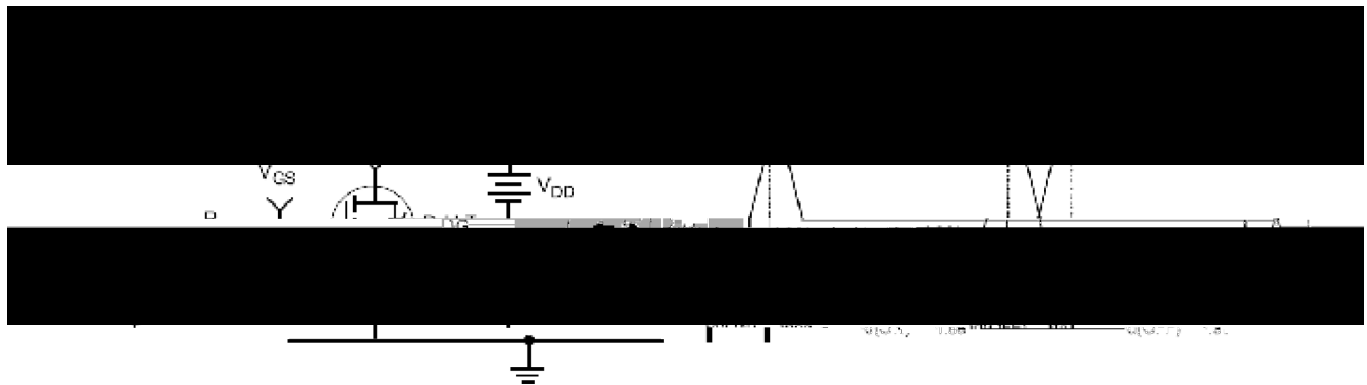
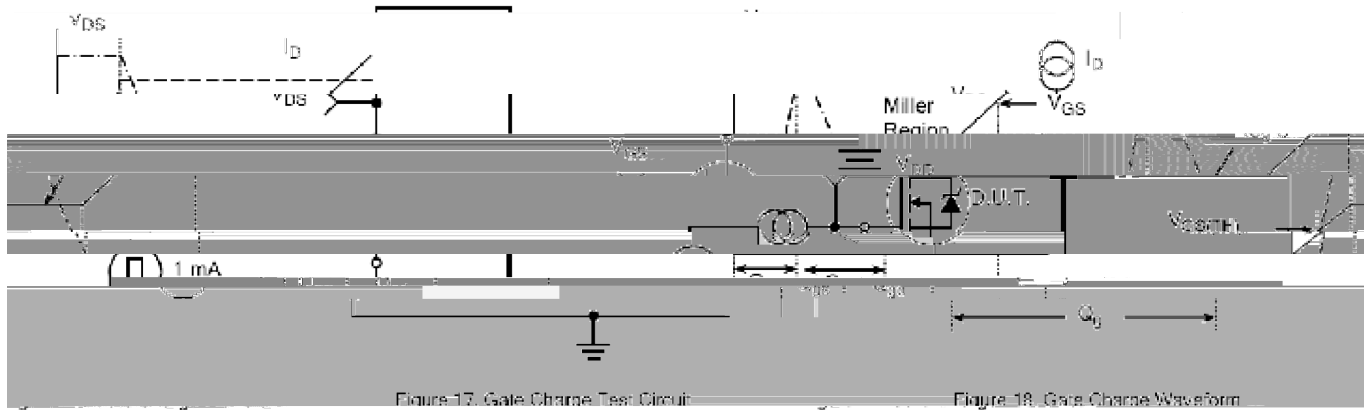


Figure 16. Typical Body Diode Transfer Characteristics





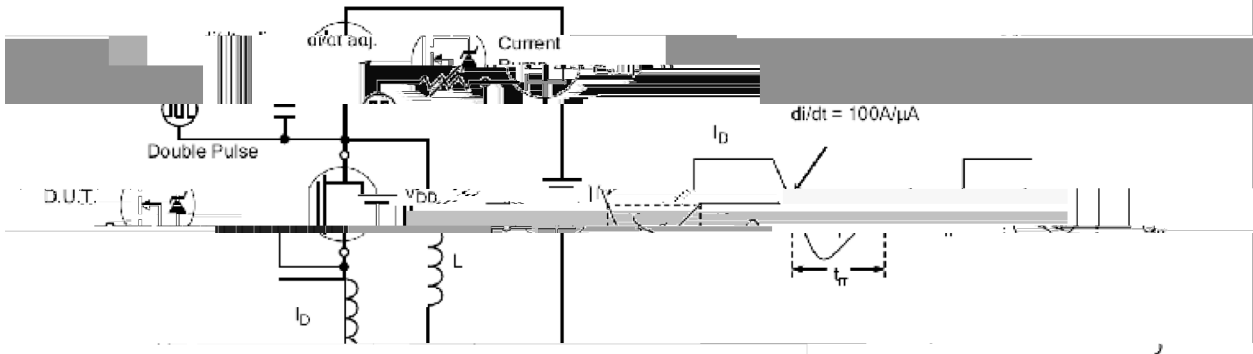


Figure 21. Basic Reverse Recovery Test Circuit

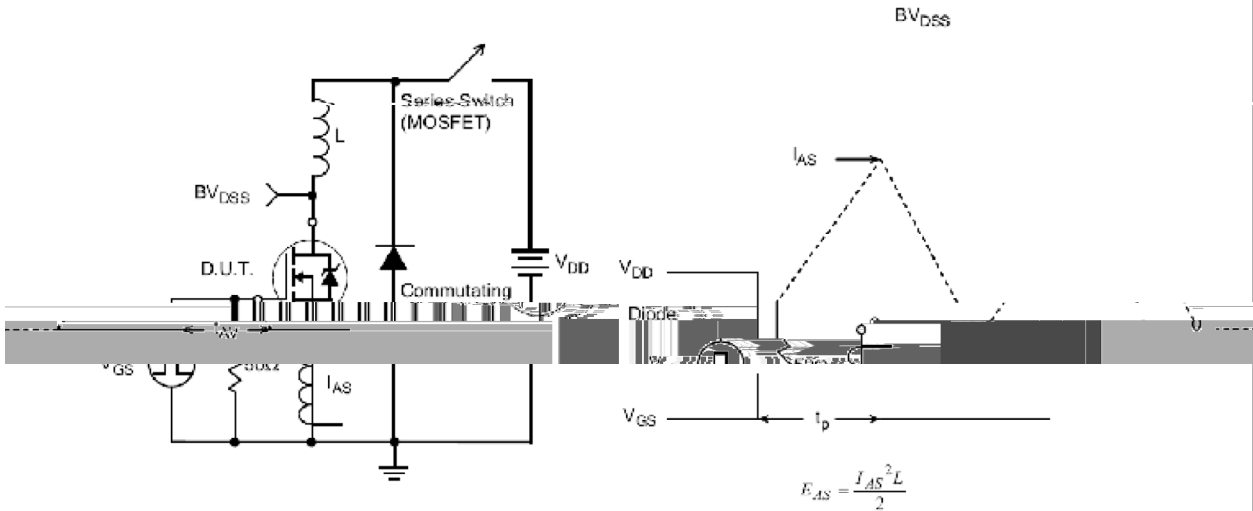
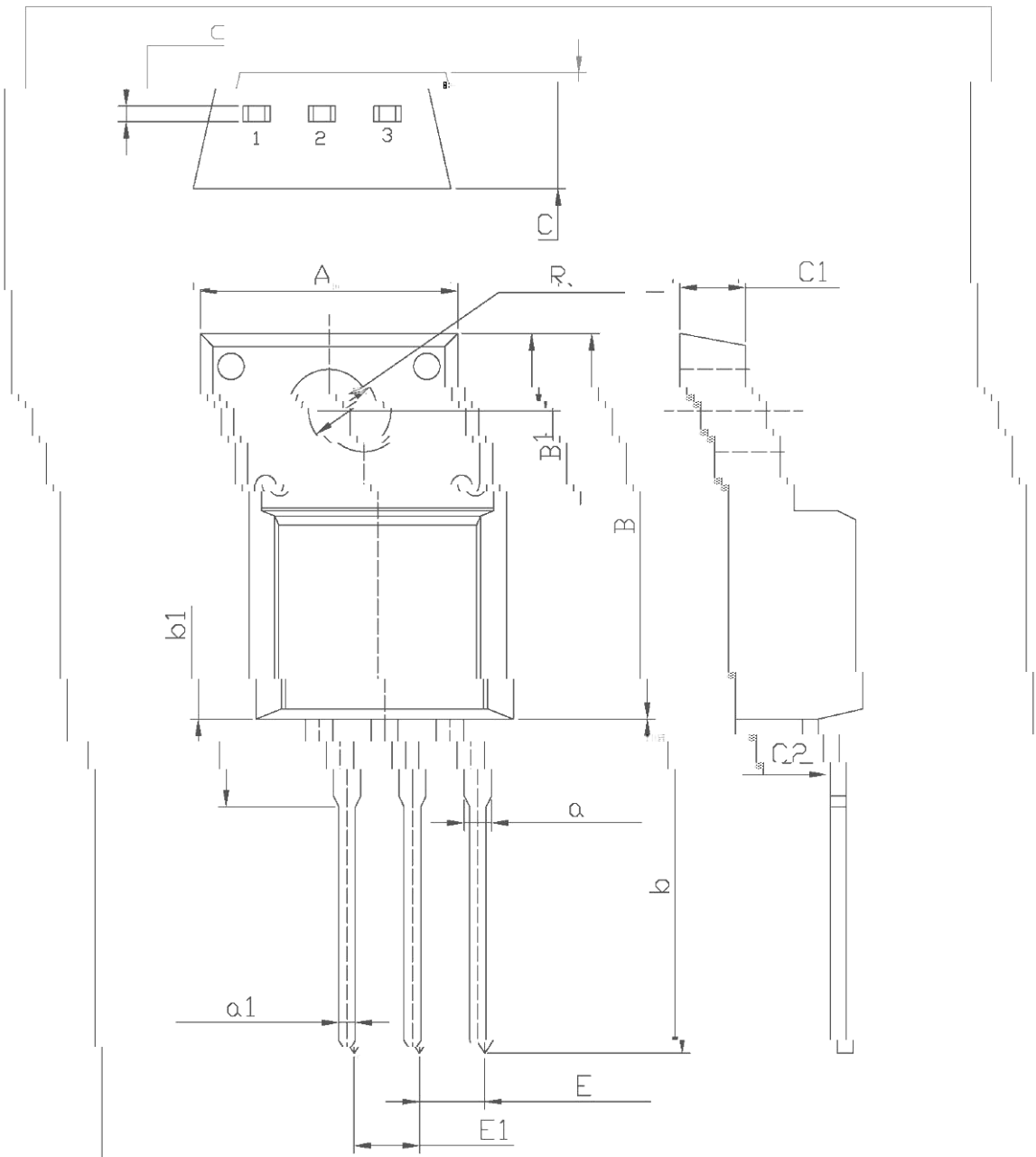


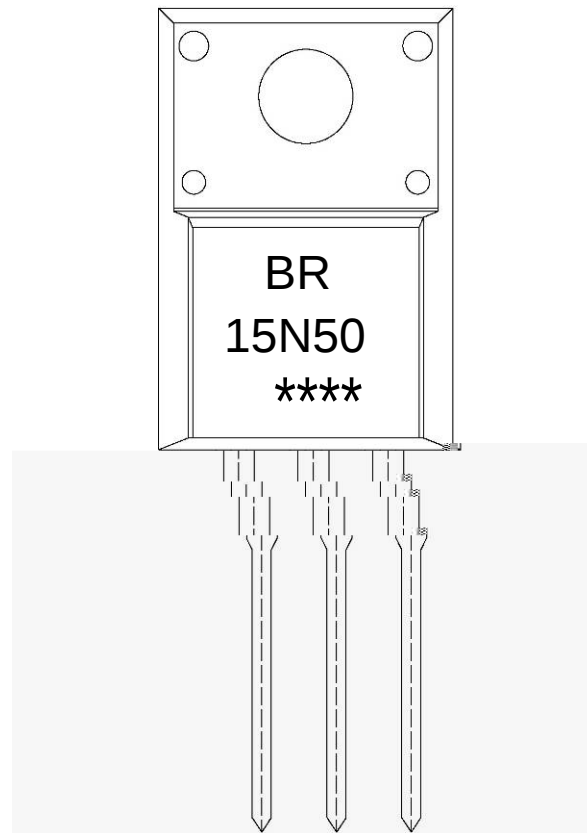
Figure 23. Unclamped Inductive Switching Test Circuit

Figure 24. Unclamped Inductive Switching Waveforms

TN-220E1 单位: mm



Symbol	Dimensions In Millimeters		Symbol	Dimensions In Millimeters	
	Min	Max		Min	Max
C	4.5	4.9	b1	2.90	3.90
C	0.4	0.6	a	1.08	1.48
A	9.96	10.36	a1	0.70	0.90
B	15.67	16.07	E	2.34	2.74
B1	3.30	3.50	E1	2.34	2.74
R	3.08	3.28	C1	2.34	2.74
b	12.48	13.48	C2	2.56	2.96



BR

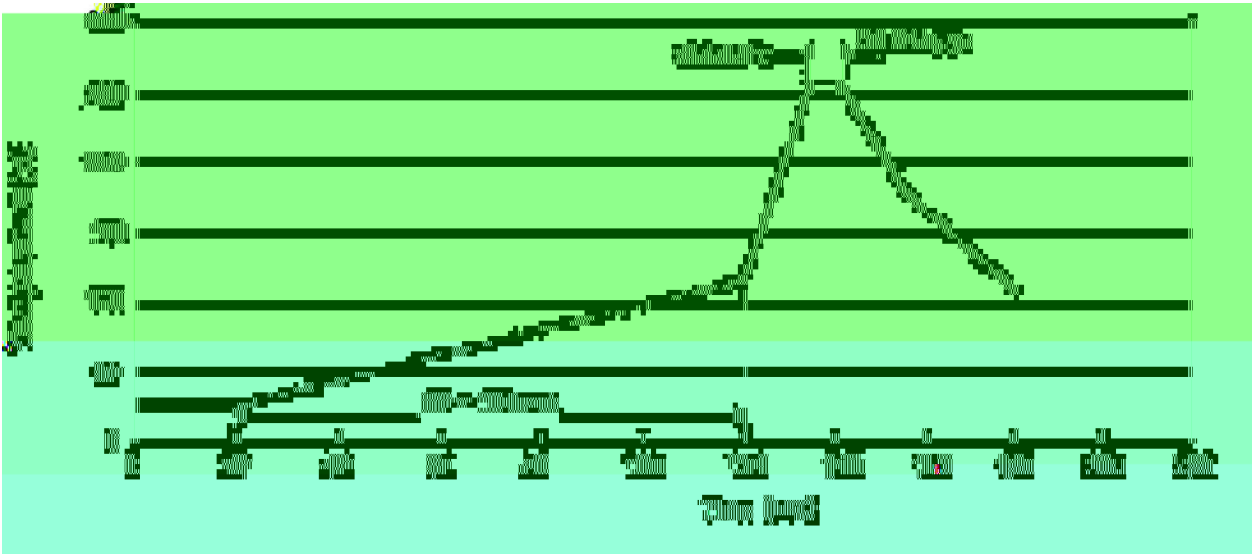
15N50

Note:

BR: Company Code

15N50: Product Type.

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



Note:

- 1

25 150

60 90sec;
- 2

255±5

5±0.5sec;
- 3

2 10

/sec.
- 1.Preheating:25~150

,

Time:60~90sec.
- 2.Peak Temp.:255±5

,

Duration:5±0.5sec.
3. Cooling Speed: 2~10

,

/sec.

270±5

10±1 sec.

Temp.:270±5℃

Time:10±1 sec

/ 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-220FL	50	20	1,000	5	5,000	532×33×7.0	555×164×50	575×290×180