



BSS123DW

N-Channel and N-Channel Complementary MOSFET

Product Summary

V_{DS}

100V



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Electrical Characteristics (T_J=25 unless otherwise noted)

Parameter	Symbol	Conditions	Min	Typ	Max	Units
Static Parameter						
Drain-Source Breakdown Voltage	BV _{DSS}	V _{GS} =0V, I _D =250μA	100	-	-	V
Zero Gate Voltage Drain Current	I _{DSS}	V _{DS} =100V, V _{GS} =0V	-	-	1	μA
		V _{DS} =100V, V _{GS} =0V, T _J =150	-	-	100	
Gate-Body Leakage Current	I _{GSS}	V _{GS} = ±20V, V _{DS} =0V	-	-	±100	nA
Gate Threshold Voltage	V _{GS(th)}	V _{DS} = V _{GS} , I _D =250μA	1.0	1.8	2.5	V
Static Drain-Source On-Resistance	R _{DS(ON)}	V _{GS} =10V, I _D =200mA	-	2.6	3.4	
		V _{GS} =4.5V, I _D =200mA	-	2.8	3.6	
Diode Forward Voltage	V _{SD}	I _S =200mA, V _{GS} =0V	-	-	1.2	V
Gate resistance	R _G	f=1MHz	-	5.5	-	
Maximum Body-Diode Continuous Current	I _S		-	-	200	mA
Dynamic Parameters						
Input Capacitance	C _{iss}		-	35	-	
		V _{DS} =50V, V _{GS} =0V, f=1MHz				pF



Typical Electrical and Thermal Characteristics Diagrams

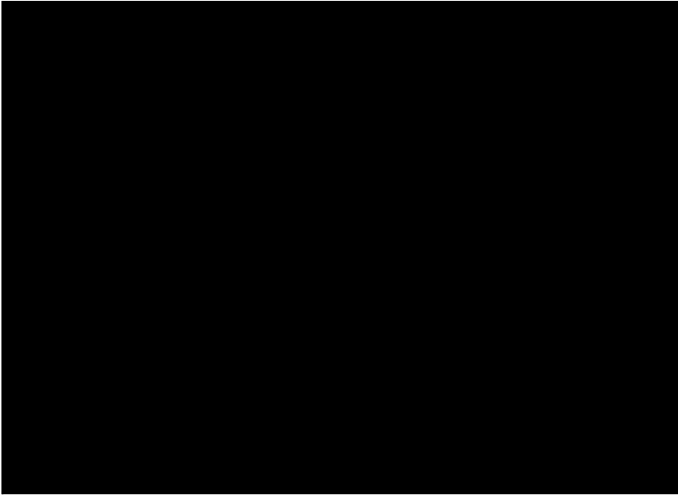


Figure 1. Output Characteristics

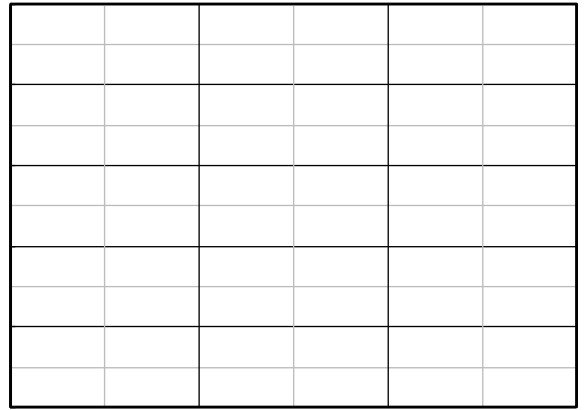


Figure 2. Transfer Characteristics

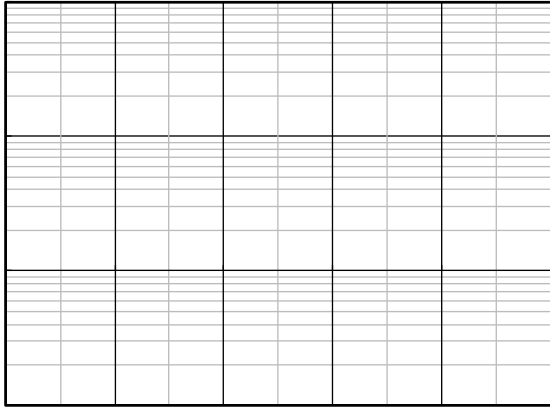


Figure 3. Capacitance Characteristics

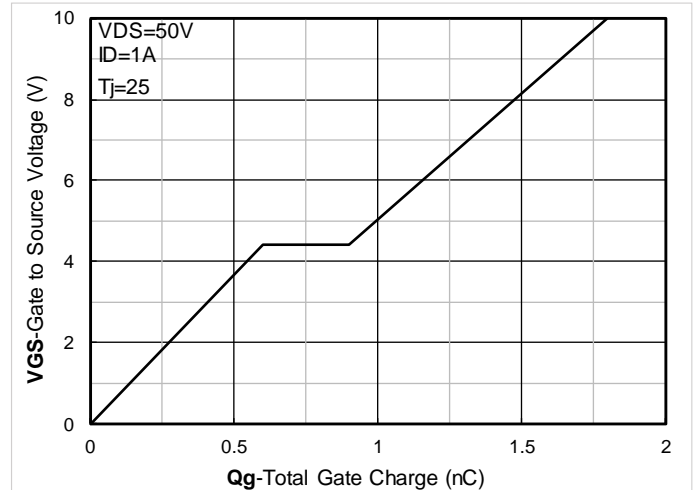
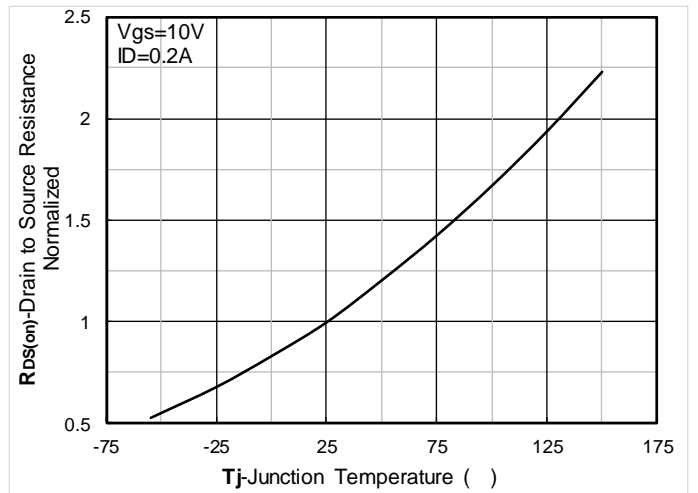
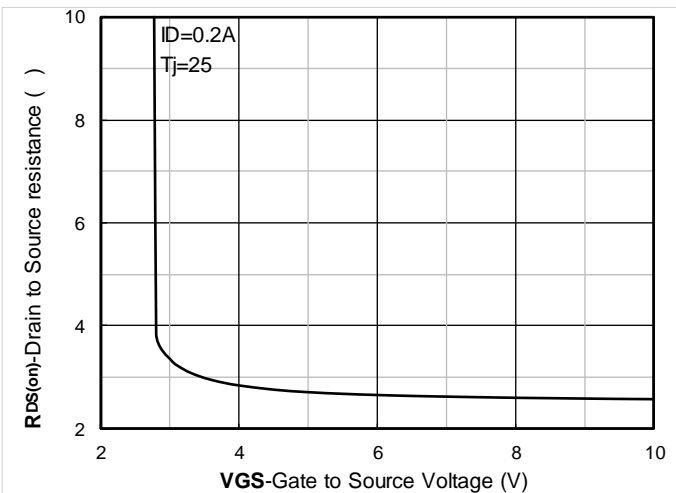


Figure 4. Gate Charge



Figure

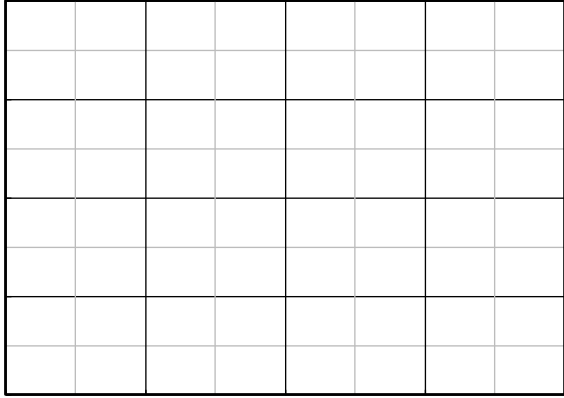


Figure 7. $R_{DS(on)}$ VS Drain Current

Figure 8.



Figure B. Gate Charge Test Circuit & Waveform

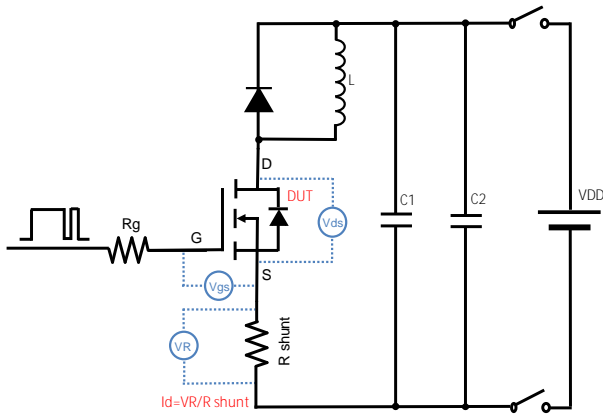


Figure C. Resistive Switching Test Circuit & Waveform

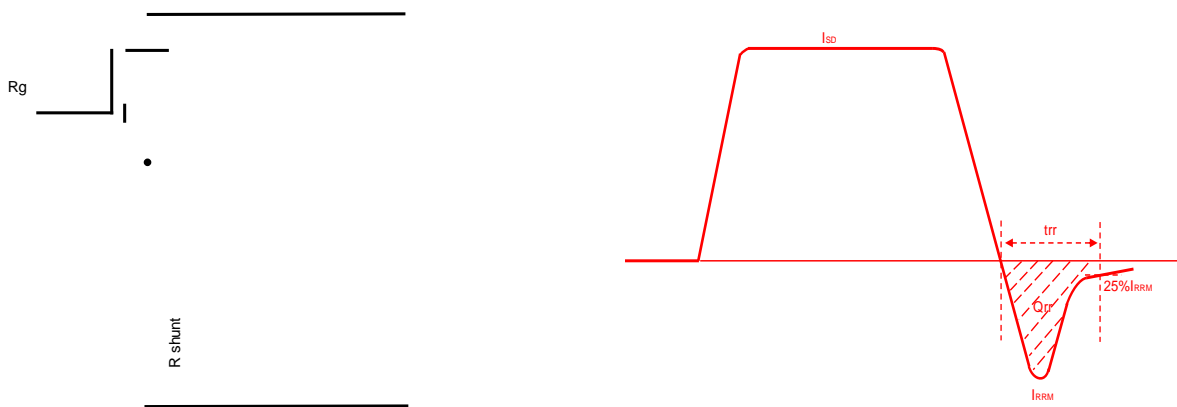


Figure D. Diode Recovery Test Circuit & Waveform



SOT-363 Package information





BSS123DW

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