

BRCS3134WA

Rev.D Feb.-2024

/ Descriptions

SOT-323 N MOS

N-Channel MOSFET in a SOT-323 Plastic Package.

/ Features

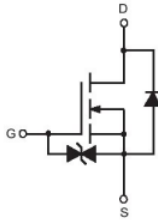
2KV

Sensitive gate trigger current and Low Holding current.ESD protected up to 2KV, HF Product.

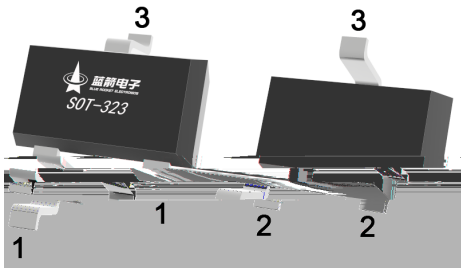
/ Applications

Intended for use in general purpose switching and phase control applications.

/ Equivalent Circuit



/ Pinning



Pin1:G

Pin2:S

Pin3:D

/ Marking

See Marking Instructions.

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DATA SHEET

Parameter	Symbol	Rating	Unit	
Drain-Source Voltage	V_{DSS}	20	V	
Gate-Source Voltage	V_{GSS}	± 8	V	
Drain Current – Continuous	I_D	0.75	A	
Pulsed Drain Current	I_{DM}	3	A	
Power Dissipation	P_D	200	mW	
Junction and Storage Temperature Range	T_J, T_{stg}	-55 to 150		
Thermal resistance, junction - ambient	$t \leq 10s$	R_{JA}	450	/W
	Steady-State		570	

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	V_{DSS}	$V_{GS}=0$ $I_D=250\mu A$	20	22.9		V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{GS}=0$ $V_{DS}=20V$			1	μA

/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Total Gate Charge	Q_g	$V_{GS}=4.5V,$ $I_D=0.4A$ $V_{DS}=10V,$		0.85		nC
Gate Source Charge	Q_{gs}			0.1		
Gate Drain Charge	Q_{gd}			0.25		
Turn-On Delay Time	$t_{d(on)}$	$V_{GS}=4.5V$ $R_L=25$ $V_{DS}=10V$ $R_{GEN}=3$		2		ns
Turn-On Rise Time	t_r			4		ns
Turn-Off Delay Time	$t_{d(off)}$			18		ns
Turn-Off Fall Time	t_f			8		ns

/ Electrical Characteristic Curve

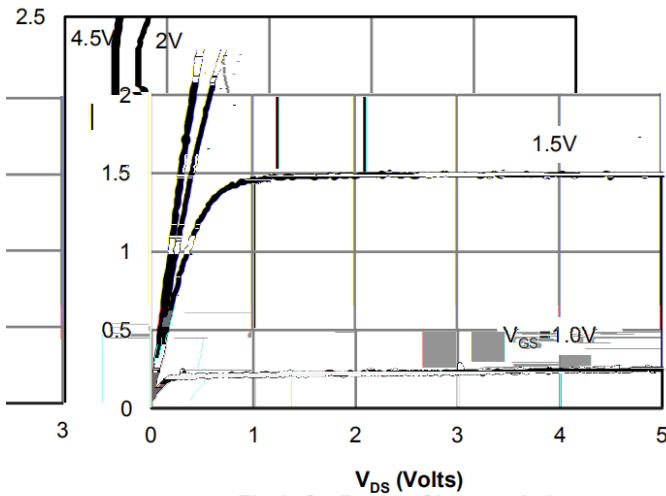


Figure 1: On-Resistance Characteristics

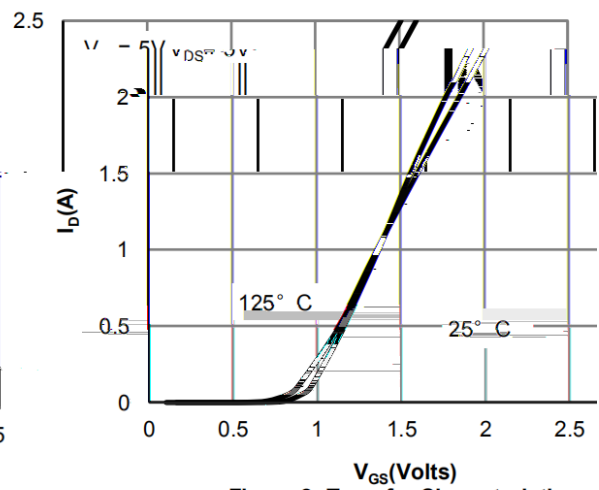


Figure 2: Transfer Characteristics

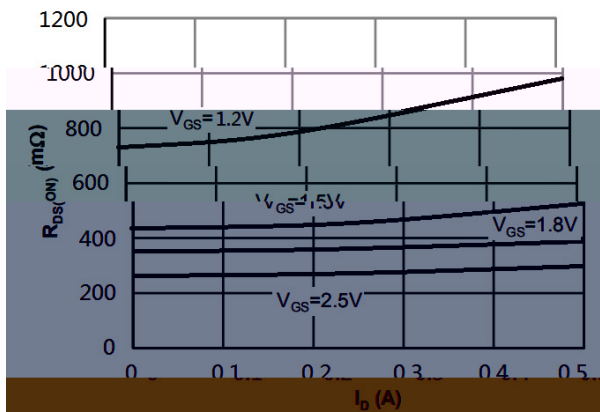


Figure 3: On-Resistance vs. Drain Current

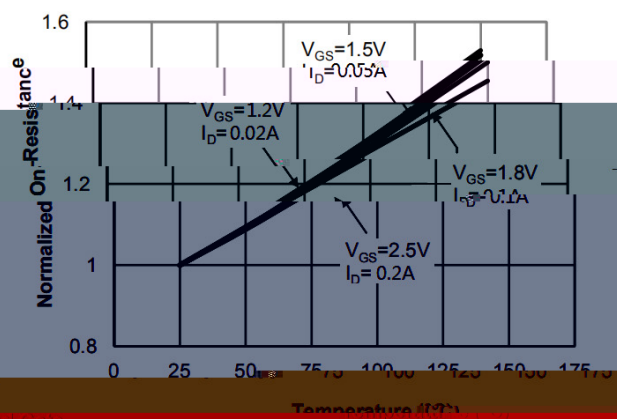


Figure 4: Normalized On-Resistance vs. Temperature

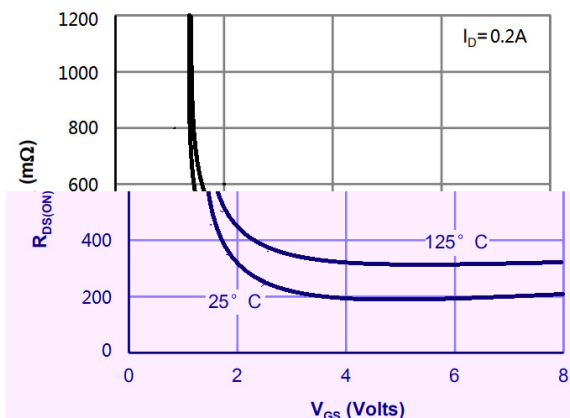


Figure 5: On-Resistance vs. Gate-Source Voltage

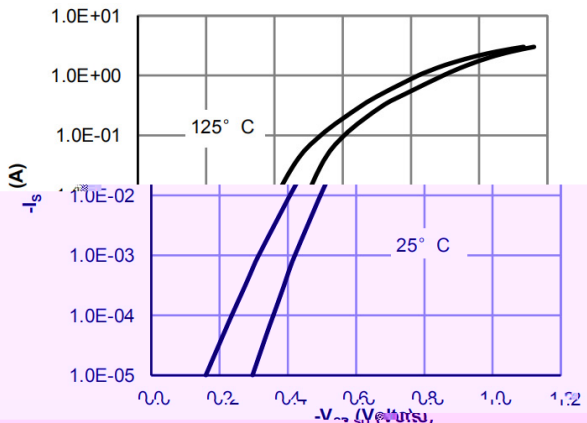
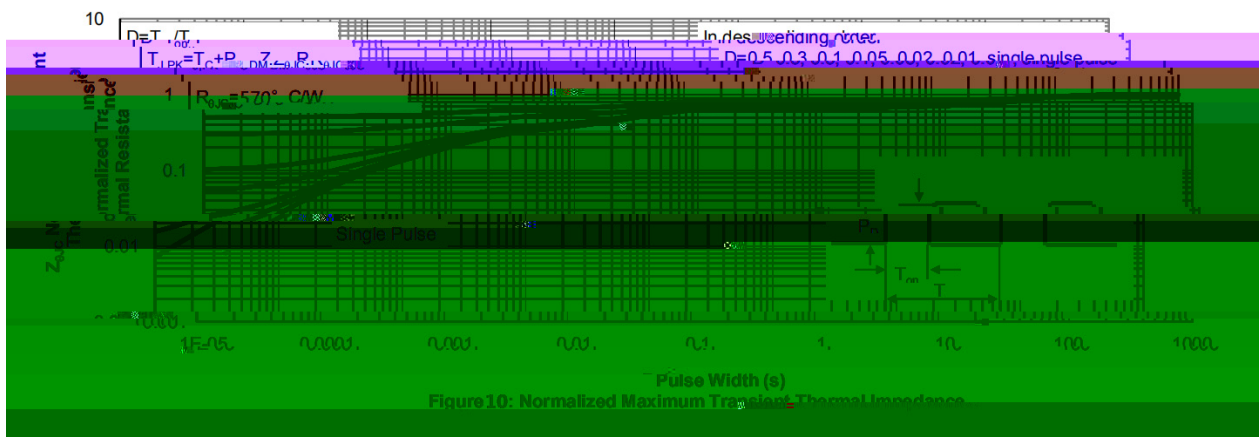
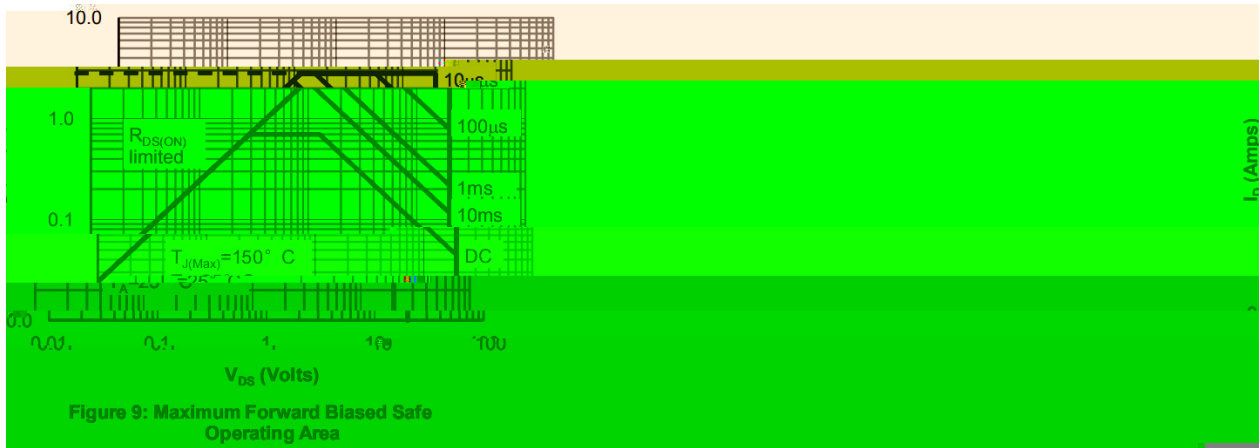
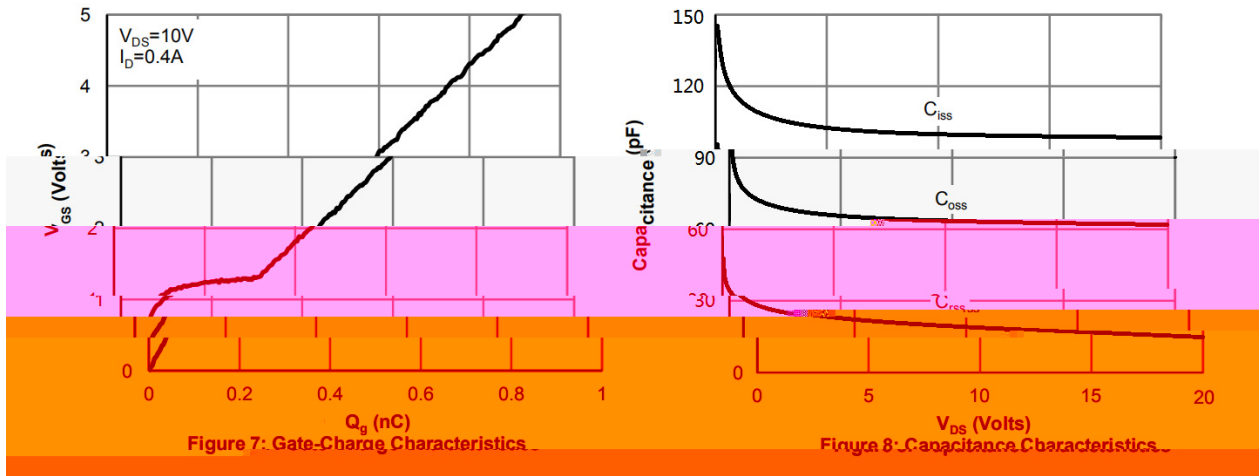


Figure 6: Body-Diode Characteristics

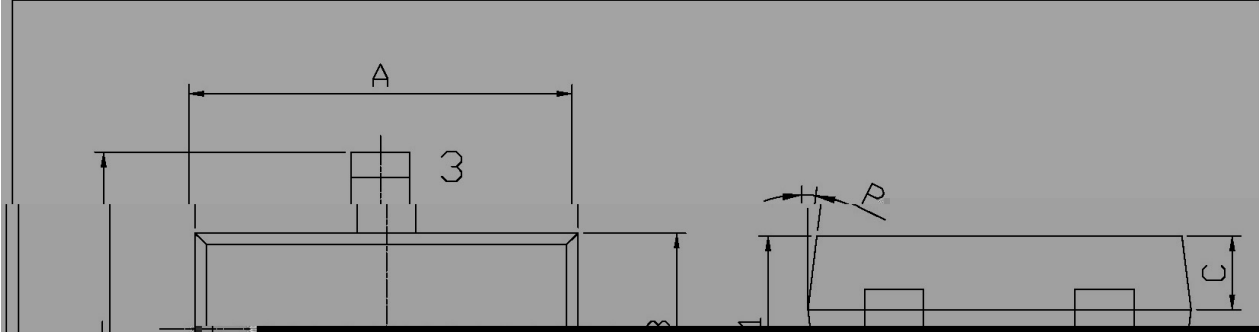
/ Electrical Characteristic Curve



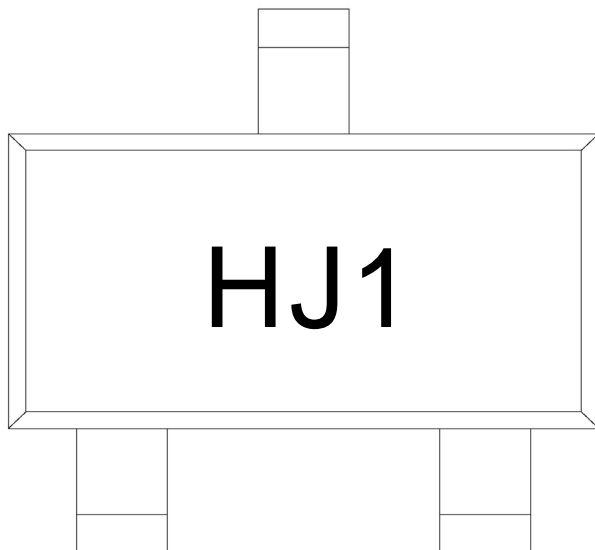
/ Package Dimensions

SOT-323

单位: mm



/ Marking Instructions



H

J1

Note:

H: Company Code

J1: Product Type Code

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