/ 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.

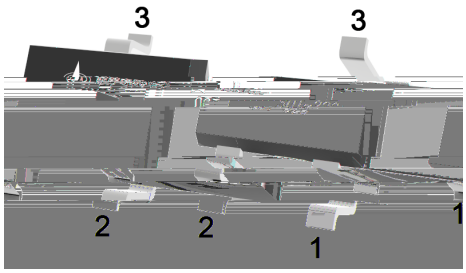
/ Applications

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

/ Equivalent Circuit



/ Pinning



Pin1:G Pin2:S Pin3:D

/ Marking

See Marking Instructions.

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 Ů 10s	$R_{\theta JA}$	450	/W
	Steady-State		570	

Parameter	Symbol	Test Conditions		Min	Typ	Max	Unit
Drain–Source Breakdown Voltage	V_{DSS}	V_{GS}=0	I_D=250uA	20	22.9		V
Zero Gate Voltage Drain Current	I_{DSS}	V_{GS}=0	V_{DS}=20V			1	εA

/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Total Gate Charge	Q_g	V_{GS}=4.5V, V_{DS}=10V, I_D=0.4A		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 V_{DS}=10V R_L=25q R_{GEN}=3q		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

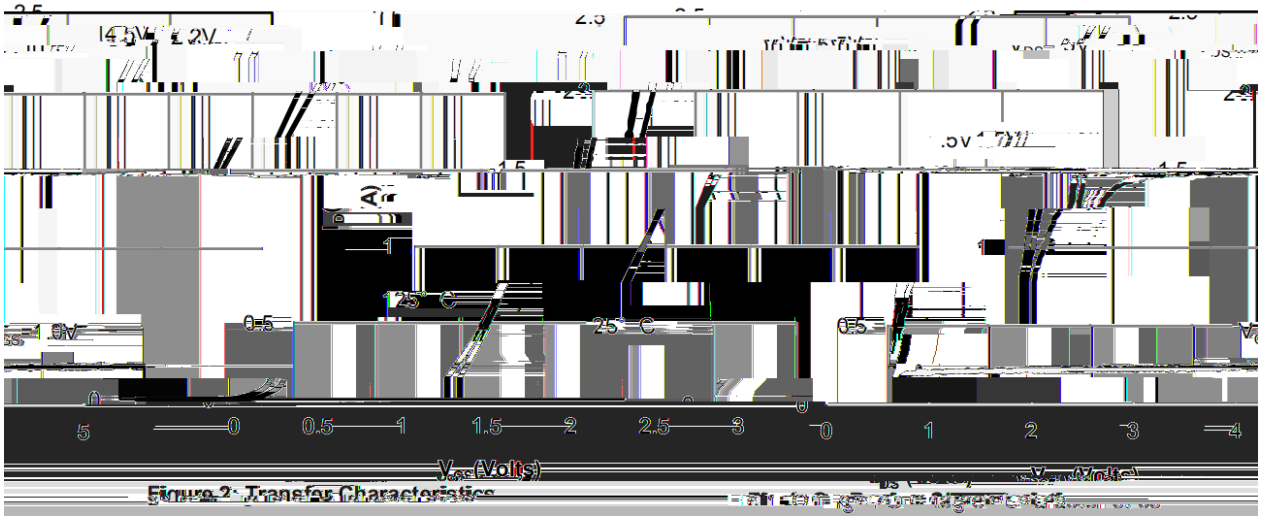
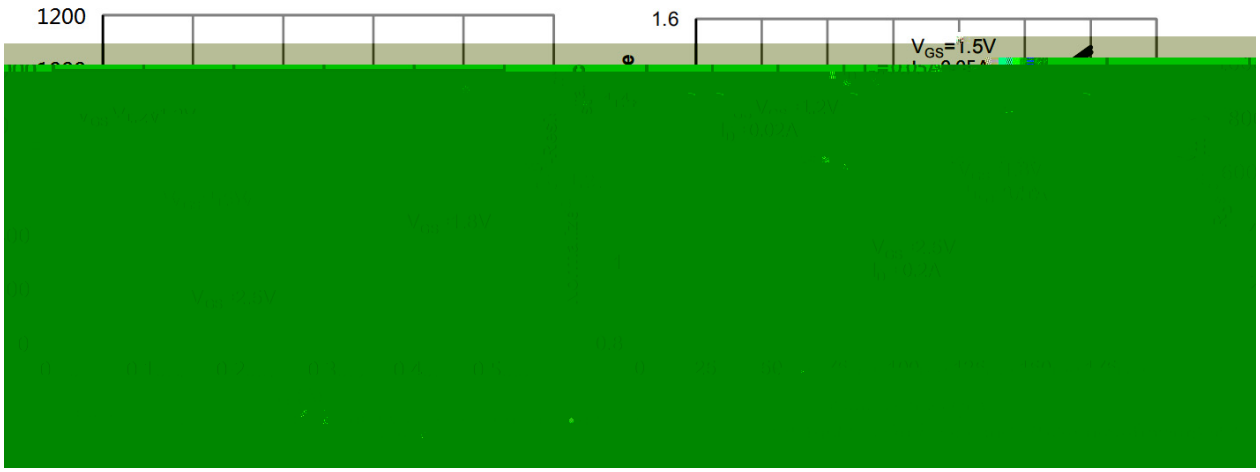


Figure 2: Transfer Characteristics



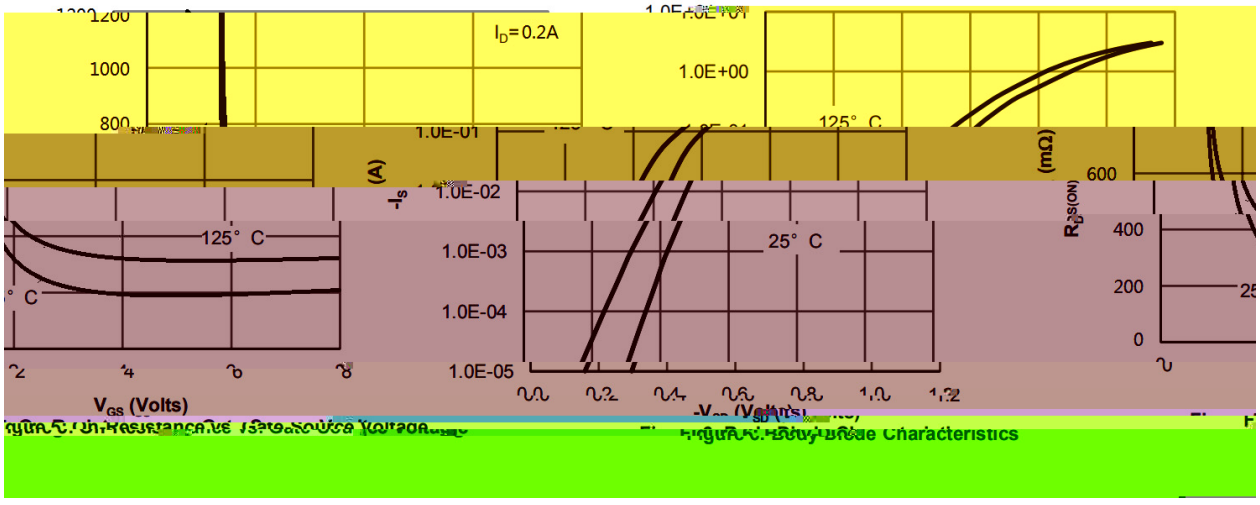
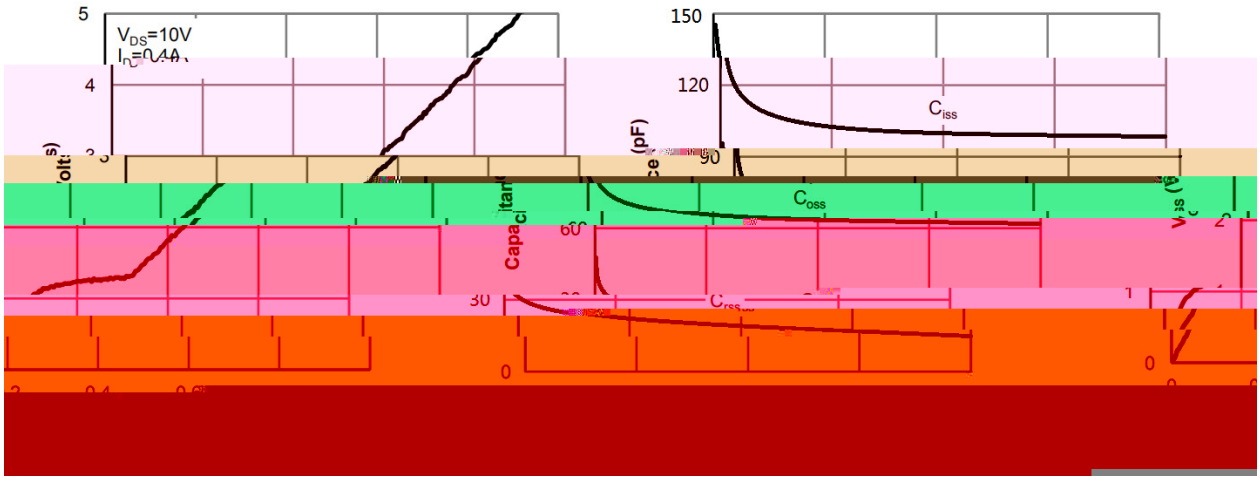
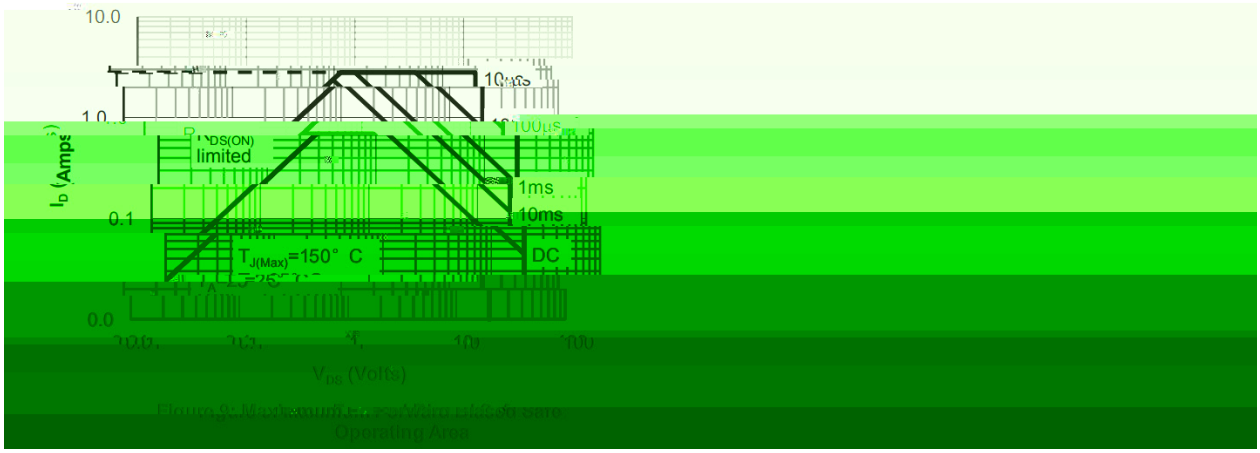


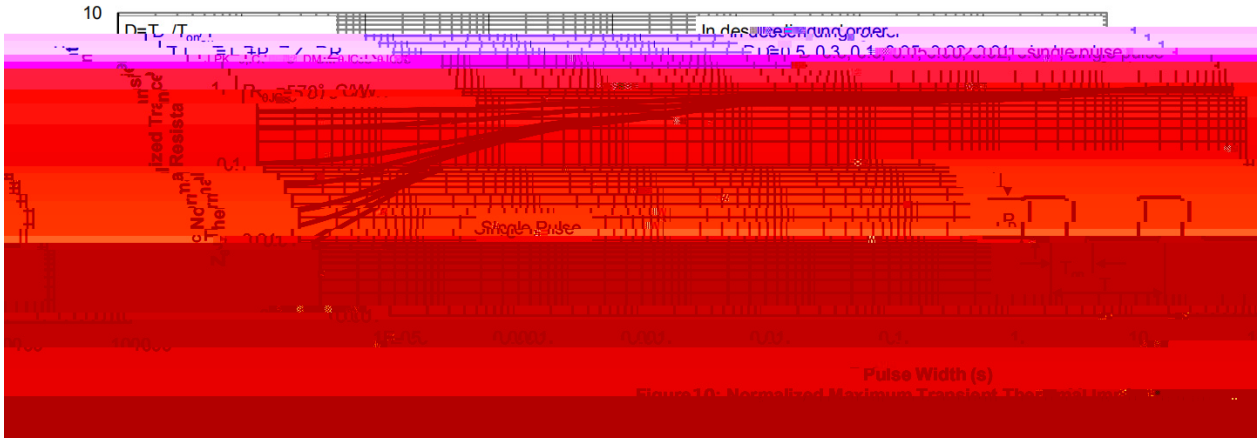
Figure 5: On-Resistance vs. Gate-Source Voltage

Figure 6: Body Diode Characteristics

/ Electrical Characteristic Curve





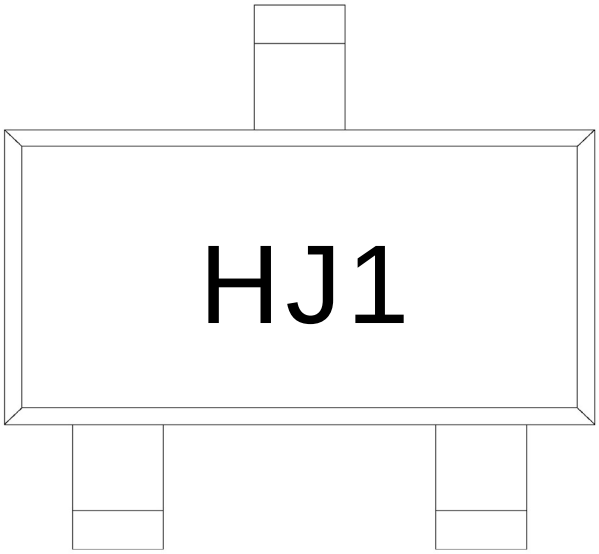


/ Package Dimensions



Symbol	Min	Max	Symbol	Min	Max
A	1.05	1.25	c	0.10	0.30
b	0.30	0.50	D	2.80	3.00
E	2.60	3.00	E1	1.50	1.70
e	0.95 TYP		e1	1.90 TYP	
L	0.30	0.60	L1	0.60 REF	
L2	0.25 BSC		R	0.10	
R1	0.10		θ	0°	8°
θ1	5°	15°	θ2	5°	15°

/ Marking Instructions



H

J1

Note:

H: Company Code

J1: Product Type Code

BRCS3134WA