

BRCs2310DMF

Rev.A Jul.-2021

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Dual N-Channel MOSFET in a SOT23-6 Plastic Package.

/ Absolute Maximum Ratings(Ta=25)

Parameter		Symbol	Rating	Unit
Drain-Source Voltage		V_{DSS}	60	V
Gate-Source Voltage		V_{GSS}	± 20	V
Drain Current – Continuous		I_D	3.0	A
Pulsed Drain Current		I_{DM}	15	A
Power Dissipation		P_D	0.9	W
Storage Temperature Range		T_{stg}	-55 150	
Maximum Junction-to-Ambient	t 10s	R_{JA}	60	/W
Maximum Junction-to-Ambient	Steady-State		96	
Maximum Junction-to-Lead	Steady-State	R_{JL}	40	

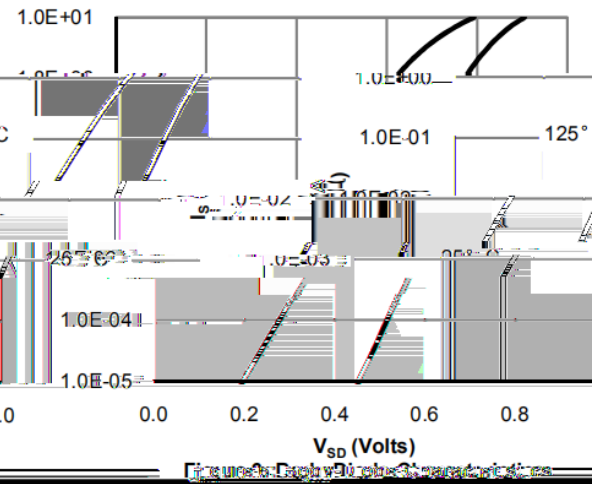
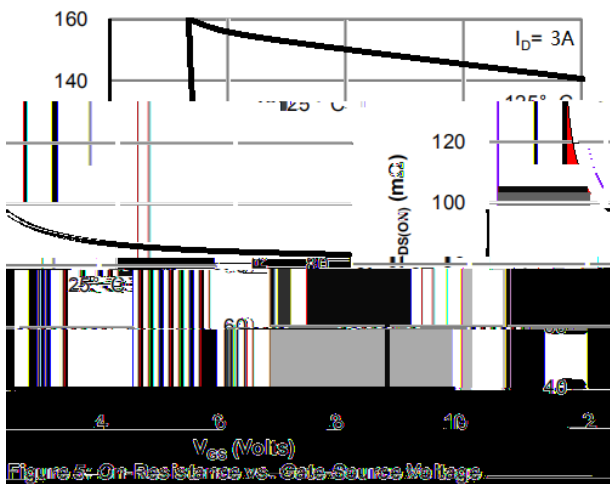
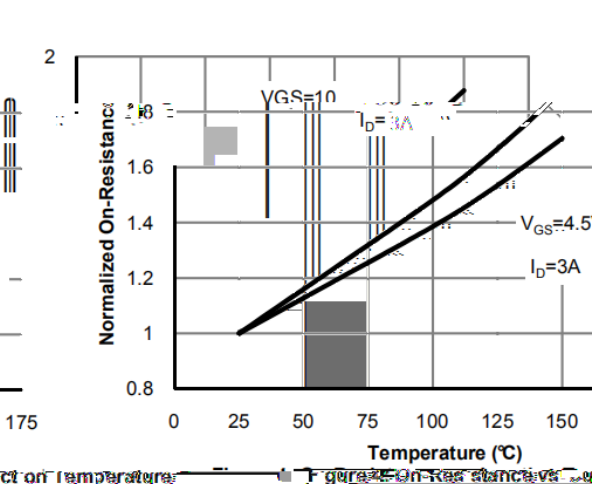
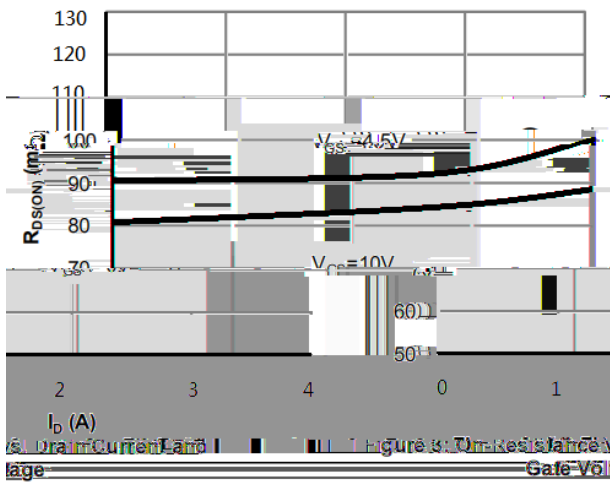
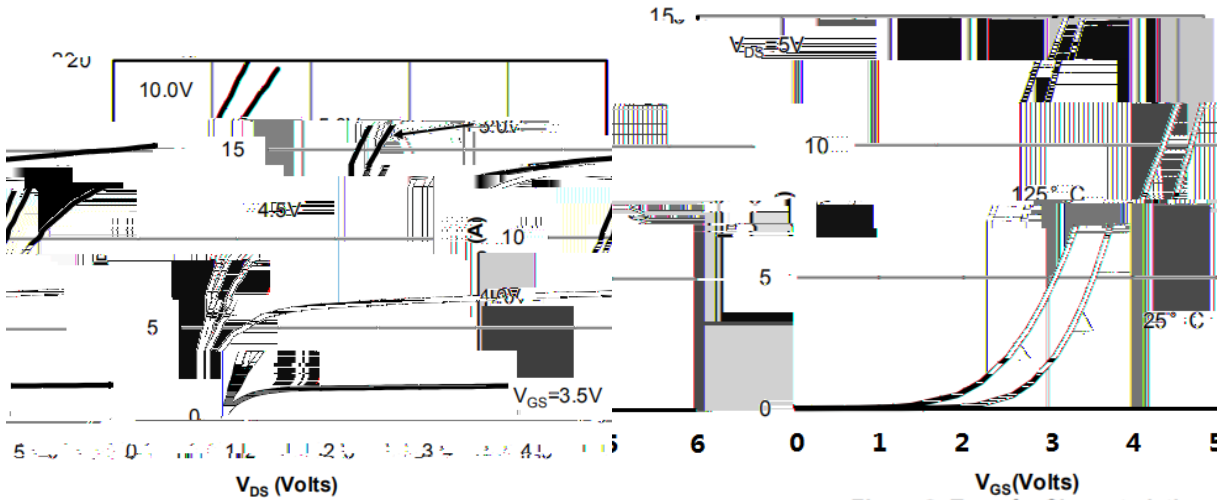
/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions		Min	Typ	Max	Unit
Drain–Source Breakdown Voltage	$V_{(BR)DSS}$	$V_{GS}=0$	$I_D=10\mu A$	60	68		V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{GS}=0$	$V_{DS}=60V$			1.0	μA
Gate–Body Leakage.	I_{GSS}	$V_{GS}=\pm 20V$	$V_{DS}=0V$			± 100	nA
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS}=V_{GS}$	$I_D=50\mu A$	1.0	1.8	3.0	V
Static Drain–Source On–Resistance	$R_{DS(on)1}$	$V_{GS}=10V$	$I_D=3A$		84	90	m
	$R_{DS(on)2}$	$V_{GS}=4.5V$	$I_D=3A$		94	110	m
Drain–Source Diode Forward Voltage	V_{SD}	$V_{GS}=0V$	$I_D=1A$		0.75	1.2	V

/ Electrical Characteristics(Ta=25)

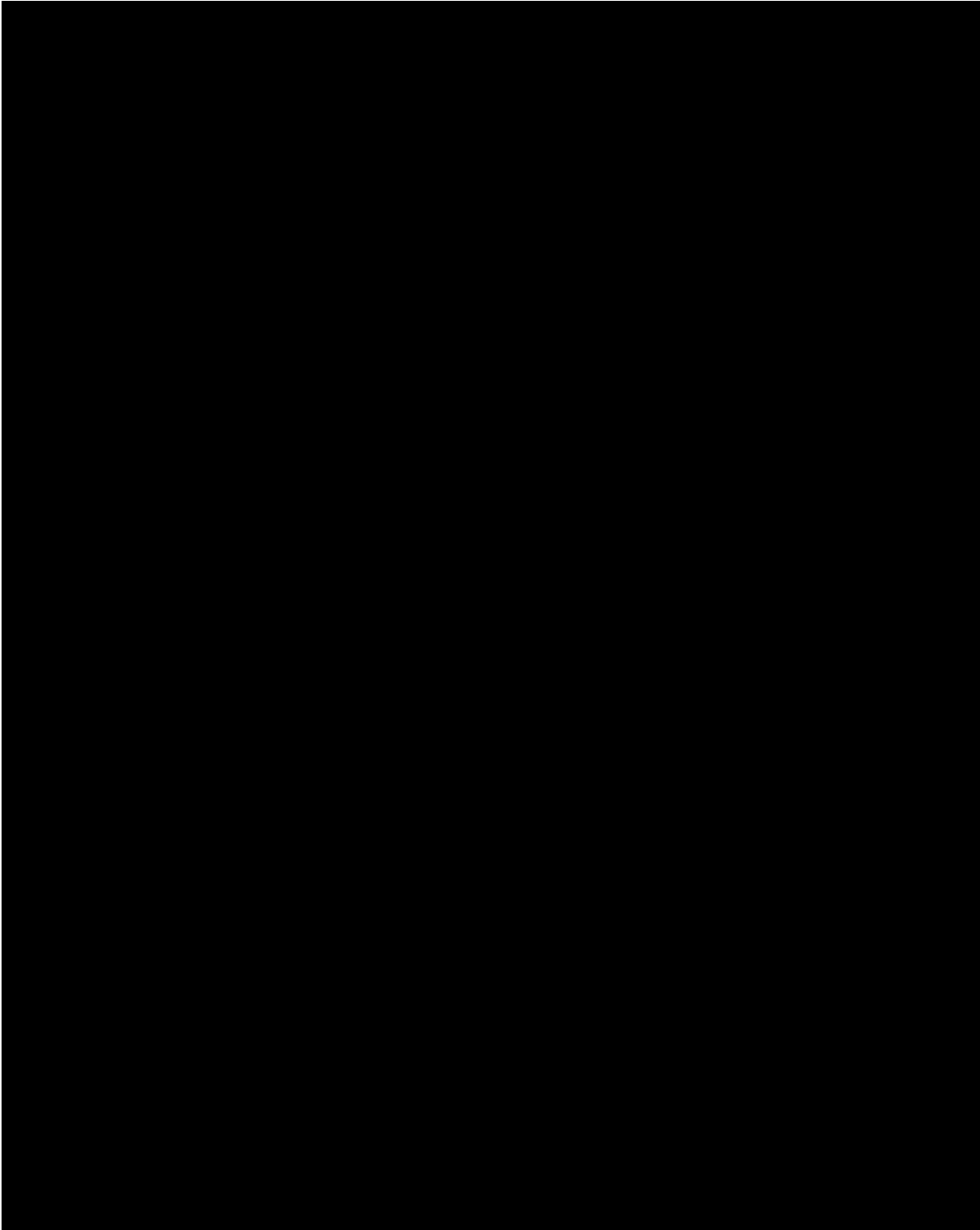
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Input Capacitance	Ciss	VGS=0V, VDS=25V f=1MHz		415		pF
Output Capacitance	Coss			37		
Reverse Transfer Capacitance	Crss			25		
Gate resistance	Rg	VGS=0V, VDS=0V f=1MHz		3.4		
Total Gate Charge	Qg(10V)	VGS=10V, VDS=30V ID=4.2A		10	12	nC
Total Gate Charge	Qg(4.5V)			5	6	
Gate Source Charge	Qgs			2		
Gate Drain Charge	Qgd			3		
Turn-On Delay Time	td(on)	VGS=10V, VDS=30V RL=7 , RGEN=3			7	ns
Turn-On Rise Time	tr				4	
Turn-Off Delay Time	td(off)				20	
Turn-Off Fall Time	tr				3	

/ Electrical Characteristic Curve

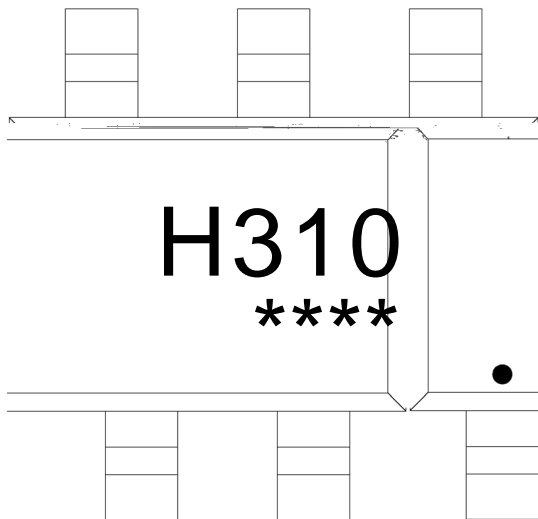


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/ Package Dimensions



/ Marking Instructions



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Note:

- H Company Code
- 310 Product Type Code
- **** Lot No. Code, code change with Lot No

() / Temperature Profile for IR Reflow Soldering(Pb-Free)

Note:

1 150 180 60