

BRCS3401MCQ

Rev.A Jun.-2022

/ Descriptions

SOT23-3 P MOS P- CHANNEL MOSFET in a SOT23-3 Plastic Package.

/ Features

$V_{DS}(V) = -30V$

$I_D = -4.2 A (V_{GS} = -10V)$

$R_{DS(ON)} < 60m (V_{GS} = -10V)$

$R_{DS(ON)} < 65m (V_{GS} = -4.5V)$

$R_{DS(ON)} < 120m (V_{GS} = -2.5V)$

AEC-Q101
Reliability, HF Product.

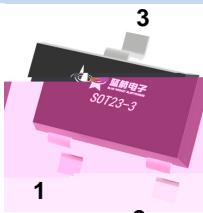
Qualified to AEC-Q101 Standards for High

/ Applications

This device is suitable for use as a load switch or in PWM applications, Meet the stringent requirements of automotive applications.

/ Equivalent Circuit

/ Pinning



PIN1 G PIN 2 S PIN 3 D

/ Marking

Marking	QB1H
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<i>@ f</i> Parameter	<i>... Z</i> Symbol	<i>f ›</i> Rating	<i>% y</i> Unit
Drain-Source Voltage	V_{DS}		

@ f Parameter	... Z Symbol	y i Ú ^ Test Conditions	Â 4 › Min	Á ° › Typ	Â Ý › Max	% y Unit
Input Capacitance	C _{iss}	V _{DS} =-15V V _{GS} =0V f=1MHz		957		pF
Output Capacitance	C _{oss}			115		
Reverse Transfer Capacitance	C _{rss}			77		
Gate resistance	R _g	V _{GS} =0V V _{DS} =0V, f=1MHz		6		
Total Gate Charge	Q _g	V _{GS} =-4.5V V _{DS} =-15V I _D =-4A		9.4		nC
Gate Source Charge	Q _{gs}			2		
Gate Drain Charge	Q _{gd}			3		
Turn-On Delay Time	t _{d(on)}	V _{GS} =-10V R _L =3.6 V _{DS} =-15V R _{GEN} =6		6.3		ns
Turn-On Rise Time	t _r			3.2		
Turn-Off Delay Time	t _{d(off)}			38.2		
Turn-Off Fall Time	t _f			12		
Body Diode Reverse Recovery Time	t _{rr}	I _F =-4A, dI/dt=100A/ s		20.2		ns
Body Diode Reverse Recovery Charge	Q _{rr}	I _F =-4A, dI/dt=100A/ s		11.2		nC

A: The value of R_{JA} is measured with the device mounted on 1in² FR-4 board with 2oz. Copper, in a still air environment with T_A=25°C. The value in any given appl

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DATA SHEET

8 -10006e W 5280758.98 62m h 537.7858.98 62.4(06 -10006e W 5336 258.98 62m W* q 0 8418 62595.-698418 6

