/ 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 Qualified to AEC-Q101 Standards for High Reliability, HF Product.

/ 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

@ *f* Parameter	… Z Symbol	*f* › Rating	% y Unit
Drain-Source Voltage	V_{DS}		

@ ƒ Parameter	… Z Symbol	y ¡ Ú ^ Test Conditions	Â 4 › Min	Á º › 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			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 $1in^2$ FR-4 board with 2oz. Copper, in a still air environment with T_A =25°C. The value in any given appl

Ô ? d • Ž ¢ / Electrical Characteristic Curve

Ø ¤ =) ¢ / Package Dimensions

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0 -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