

5 é / Descriptions

SOT23-3 .> // x N 3 MOS « | • 'ož  
4- CHANNEL MOSFET in a SOT23-3 Plastic Package.

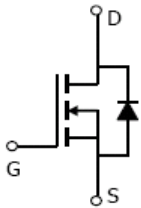
□<sup>a</sup> / Features

$V_{DS} (V) = 30V$   
 $I_D = 5.5 A (V_{GS} = 20V)$   
 $R_{DS(ON)} < 31m (V_{GS} = 10V)$   
 $R_{DS(ON)} < 43m (V_{GS} = 4.5V)$   
 ... ` AEC-Q101 ö Ö ä U ´ Å } L k —)í D }ož Qualified to AEC-Q101 Standards for High Reliability, HF Product.

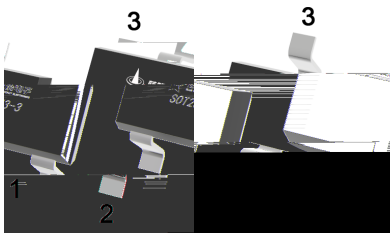
Đ ÷ / Applications

9 • ĵ ú • ¼ ê !<sup>2</sup> ò • k á V ñ • } Lož  
 This device is suitable for use as a load switch or in PWM applications, Meet the stringent requirements of automotive applications.

Ã W ] Ô . / Equivalent Circuit



• Ū - æ / Pinning



PIN 1 y G      PIN 2 y S      PIN 3 y D

, M V / Marking

Marking	B4Q
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<i>@ f</i> Parameter	<i>... Z</i> Symbol	<i>f ›</i> Rating	<i>% y</i> Unit
Drain-Source Voltage	$V_{DS}$	30	V
Drain Current – Continuous	$I_D$	5.5	A
Pulsed Drain Current	$I_{DM}$	19	A
Gate-Source Voltage	$V_{GS}$		

Electrical Characteristic Curve

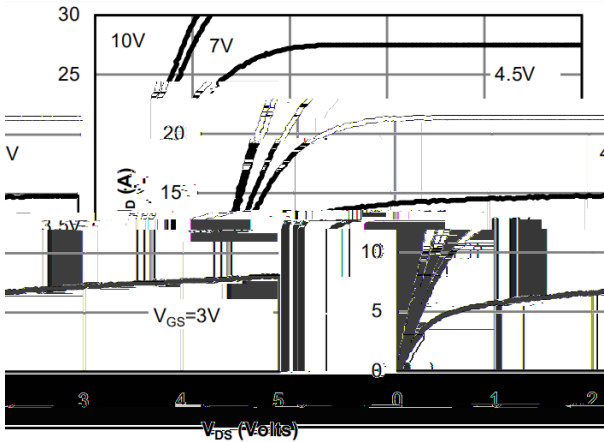


Fig.1 On-Region Characteristics

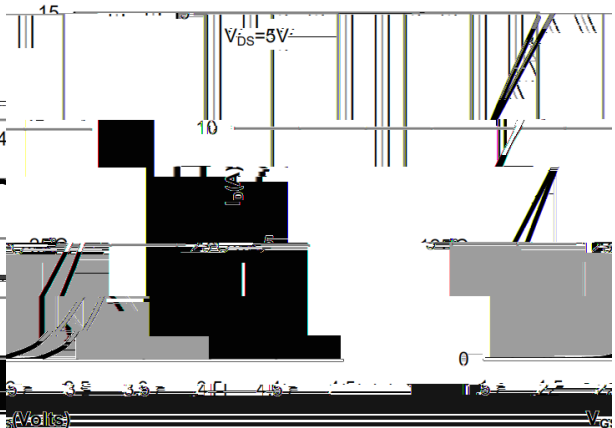


Figure 2: Transfer Characteristics

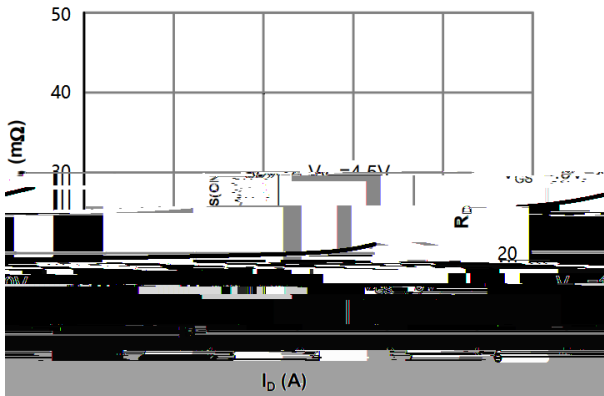


Figure 3: On-Region Characteristics

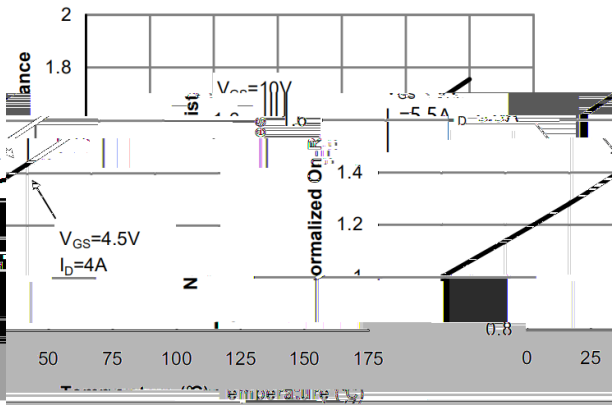


Figure 4: Normalized Drain-Source Resistance

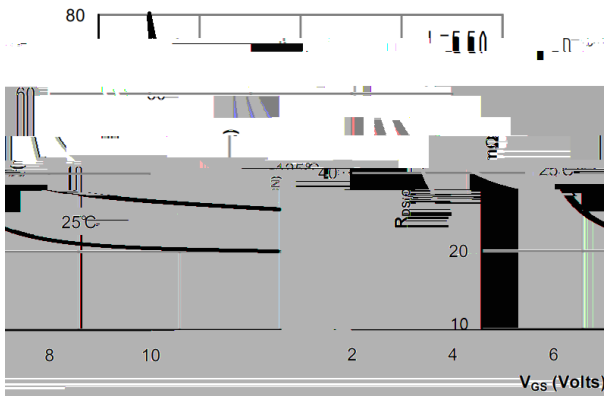


Figure 5: Drain-Source Resistance

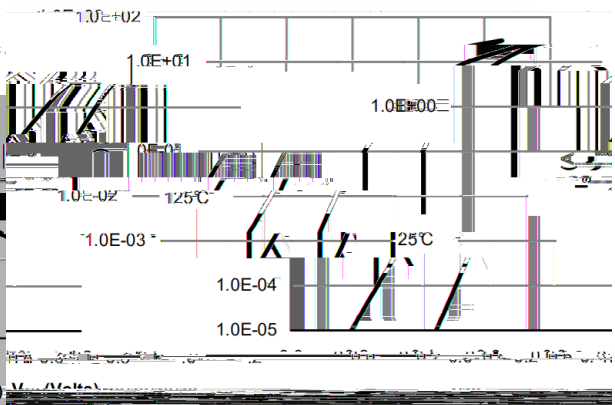


Figure 6: Drain-Source Resistance

Electrical Characteristic Curve

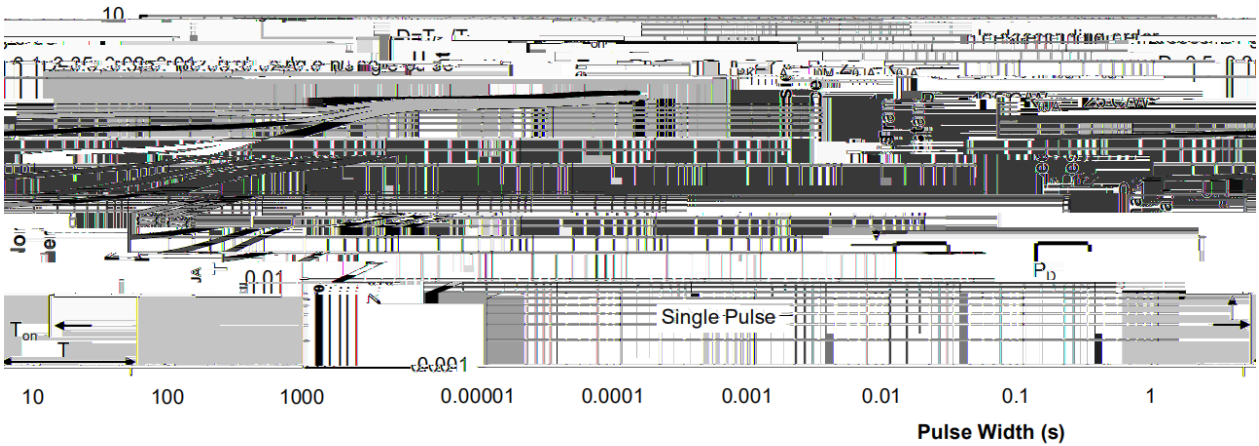
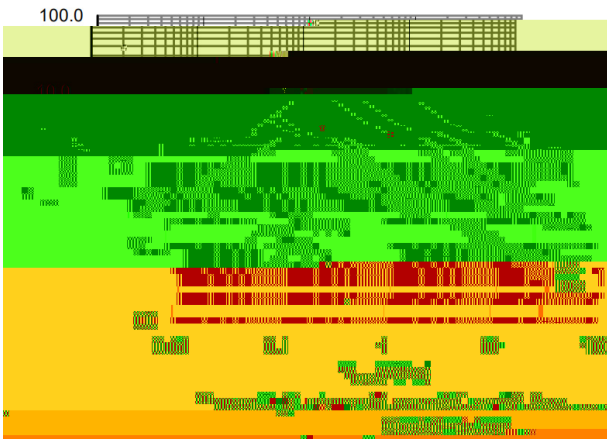
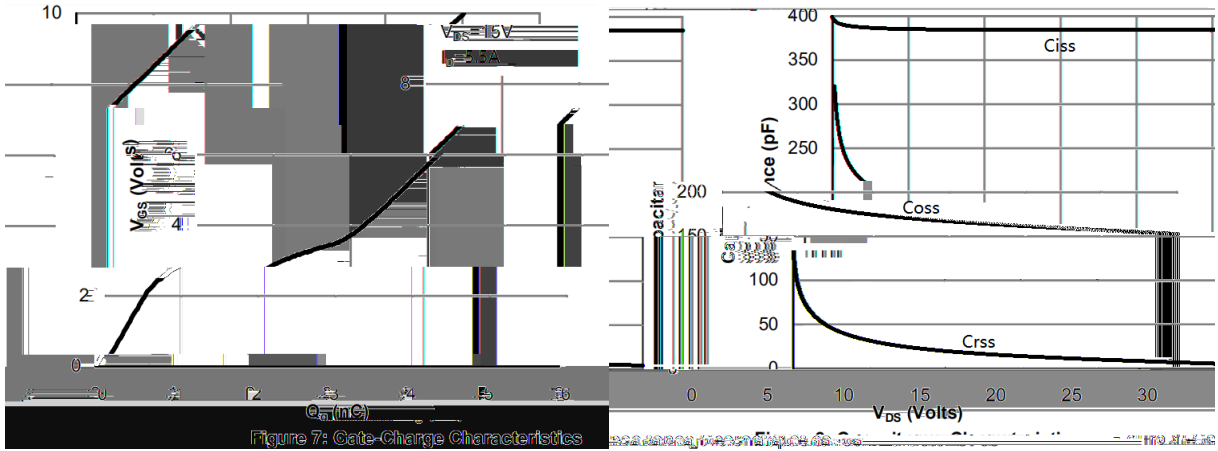
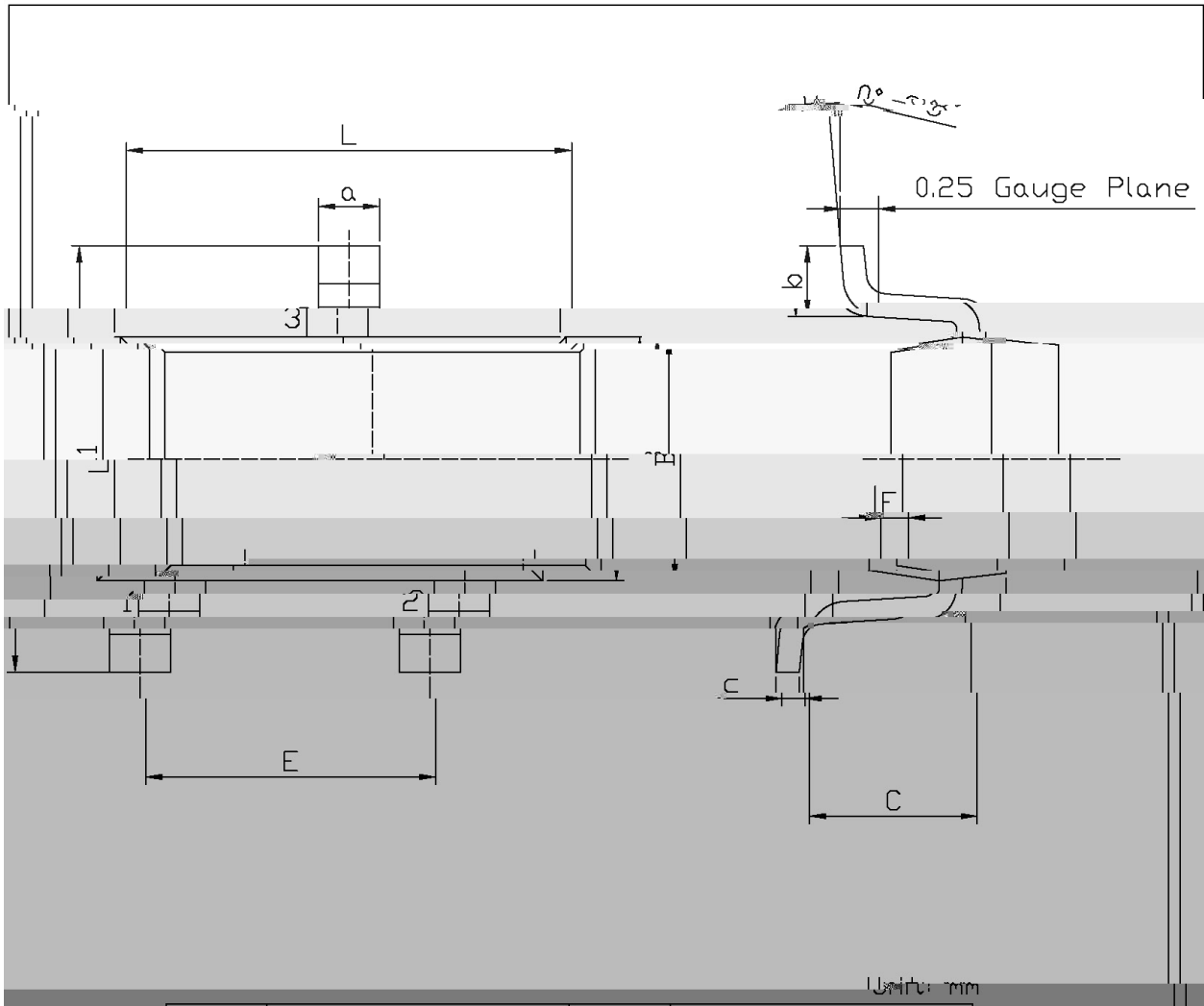
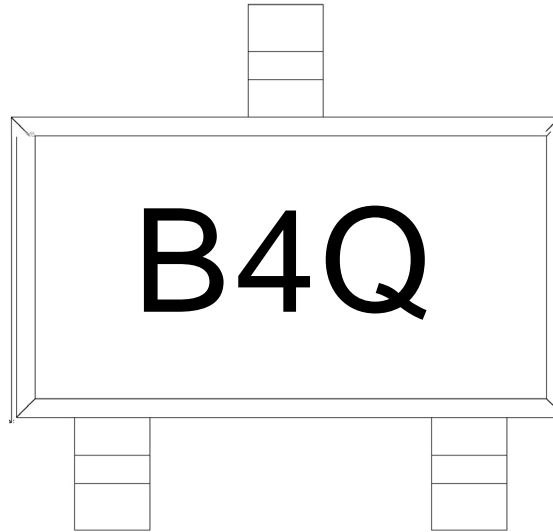


Figure 10: Normalized Maximum Transient Thermal Impedance

Ø ≡ ) ϕ / Package Dimensions





Marking

( Marking ° Z W A

Marking V ñ —)í D } ö œ

Note:

B4: Product Type Code

Q: Automobile halogen-free product Code

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<sup>a</sup>čy

Note:

- 1o• Ä ½ “ † 150 ½200 - k ž • 60 ½120sec; 1.Preheating:150~200 - , Time:60~120sec.
- 2o• Q › “ † 255 r5 - k ž • 4 Ö 5 r0.5sec; 2.Peak Temp.:255 r5 - , Duration:5 r0.5sec.
- 3o•D N ò i Ö 0 , † 2 ½10 - /sec. 3. Cooling Speed: 2~10 - /sec.

ÂD /Cã p ~ » ] / Resistance to Soldering Heat Test Conditions

“ † y 260 r5 - ž • y 10 r1 sec. Temp.:260 r5 - Time:10 r1 sec

G P á / Packaging SPEC.

2 & x / REEL

Package Type 7>û ~ E	Units ;>û !H					Dimension ;>û p . (unit Åmm <sup>3</sup> )		
	Units/Reel / --	Reels/Inner Box -- /-	Units/Inner Box /-	Inner Boxes/Outer Box - /!ç	Units/Outer Box /!ç	Reel	Inner Box	Outer Boxç
SOT23-3	3,000	10	30,000	4	120,000	7 s x8	210x205x205	445x230x435