

5 é / Descriptions

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

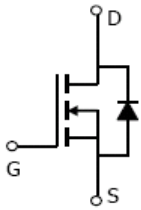
□^a / Features

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

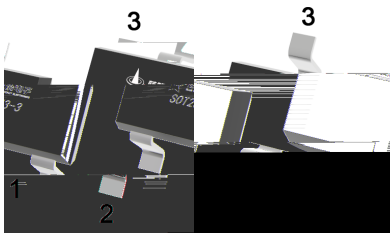
Đ ÷ / Applications

9 • ¿ ú • ¼ ê !² 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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$@ f$ Parameter	$\dots Z$ Symbol	$f \succ$ Rating	$\% y$ 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

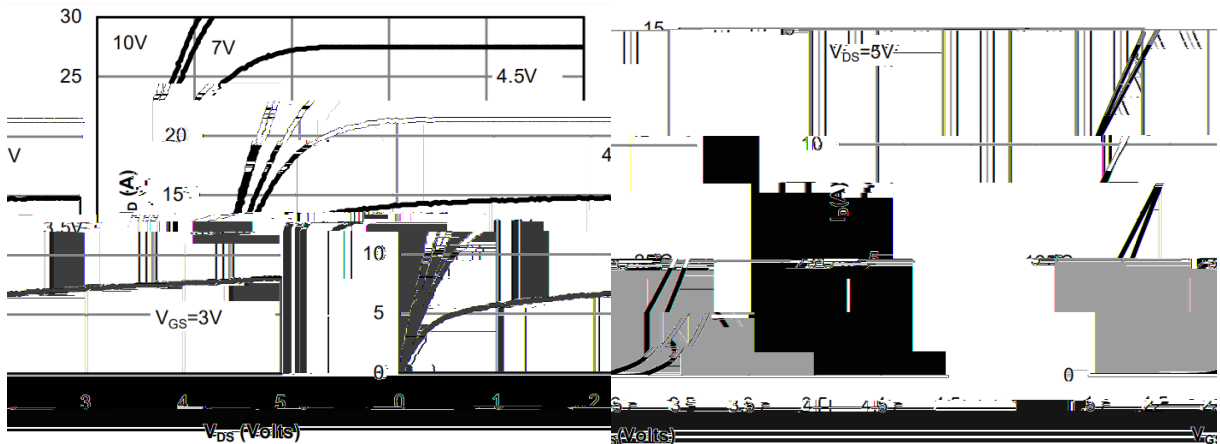


Fig.1 On-Region Characteristics

Transfer Characteristics

Figure 2: Transfer

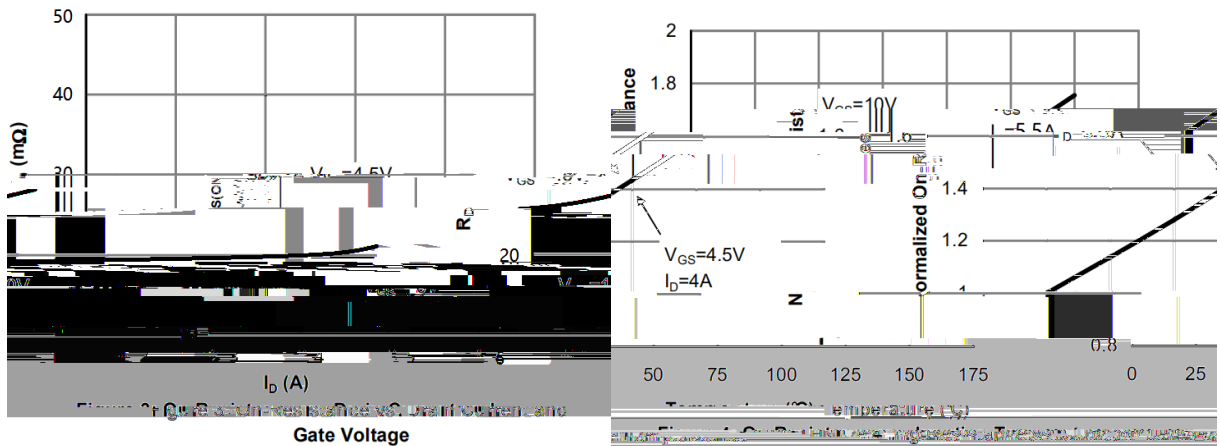


Figure 3: On-Resistance vs. Drain Current

Figure 4: Normalized On-Resistance vs. Temperature

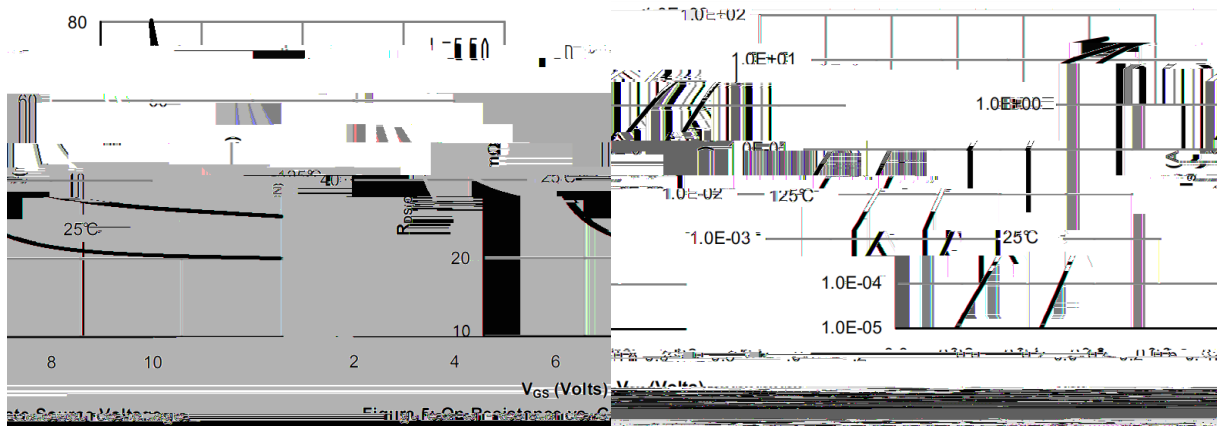
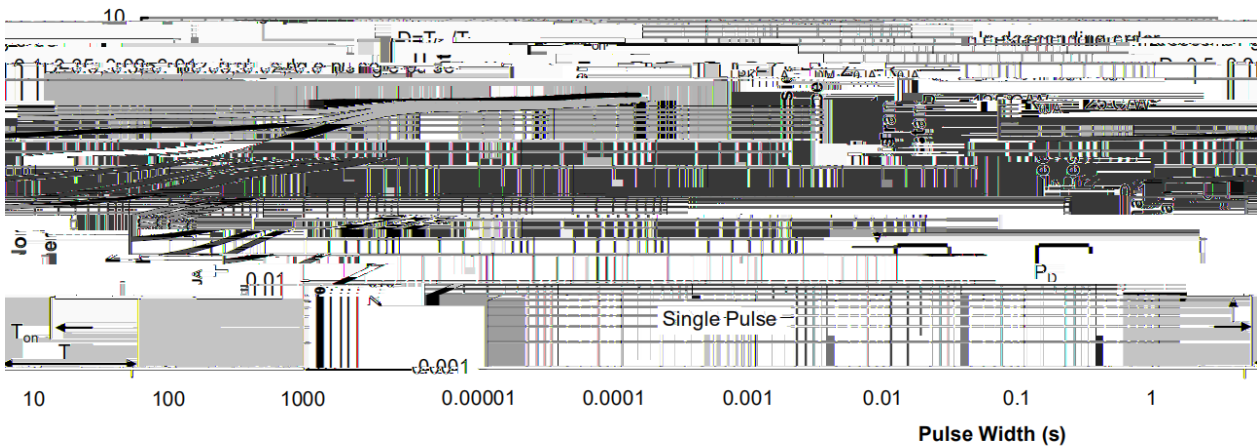
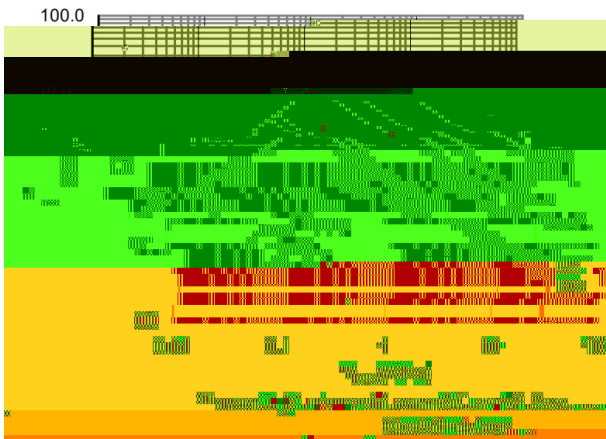
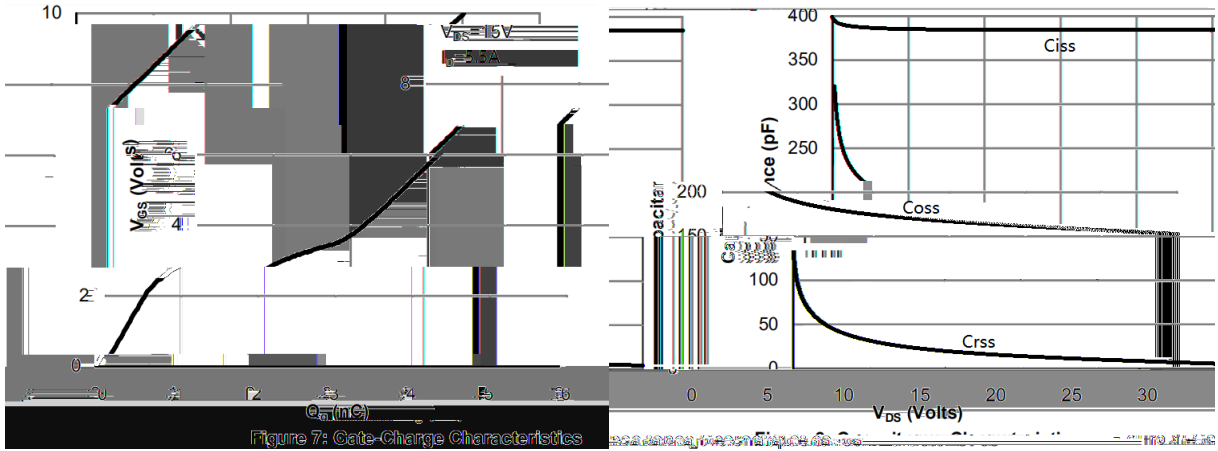


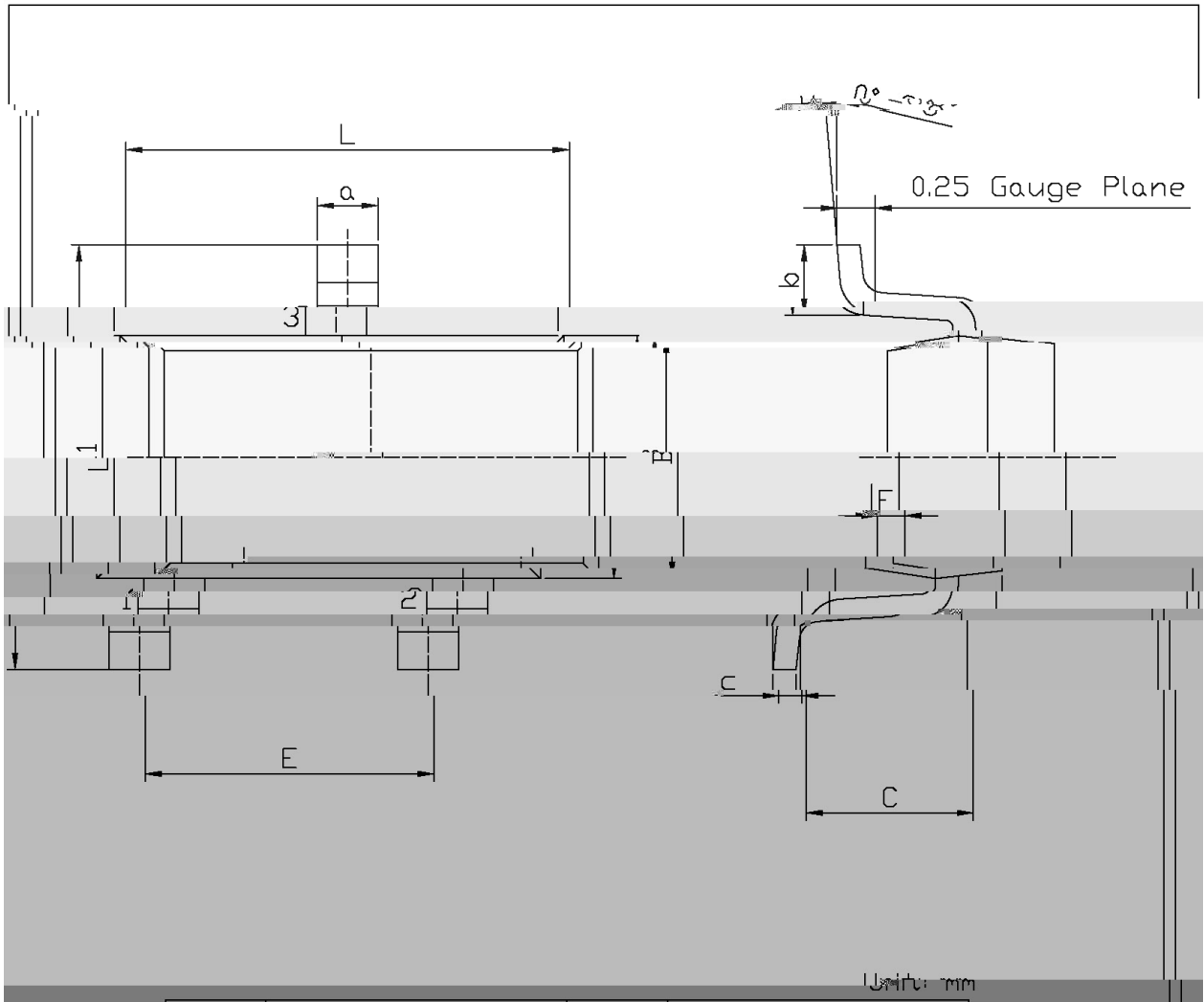
Figure 5: On-Resistance vs. Gate Voltage

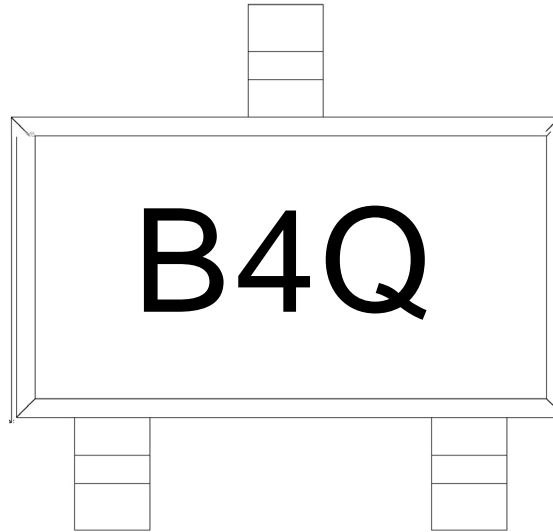
Figure 6: On-Resistance vs. Temperature

Electrical Characteristic Curve



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

šWD t... • Žϕ (x/) / :KSVKXGZ[XK 6XULORK LUX /8 8KLRU] 9URJKXOTM 6

^a ϕ y

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 ³)		
	Units/Reel / --	Reels/Inner Box -- /-	Units/Inner Box /-	Inner Boxes/Outer Box - /1ç	Units/Outer Box /1ç	Reel	Inner Box	Outer Boxç
SOT23-3	3,000	10	30,000	4	120,000	7 s x8	210x205x205	445x230x435