5 é / Descriptions

TOLL-8L / x N ?ú 3 « | • ’ ož
N-Channel MOSFET in a TOLL-8L Plastic Package .

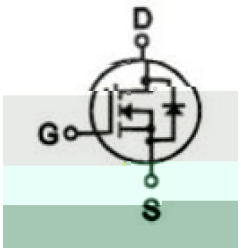
¤ ª / Features

V_{DS}(V)=100V I_D=330A
$R_{DS(ON)}$@10V ”1.5m Ÿ(Typ.1.2m Ÿ)
… ` AEC-Q101 ö Õ ä U ´ Å } L k —)í D }ož Qualified to AEC-Q101 Standards for High Reliability, HF Product.

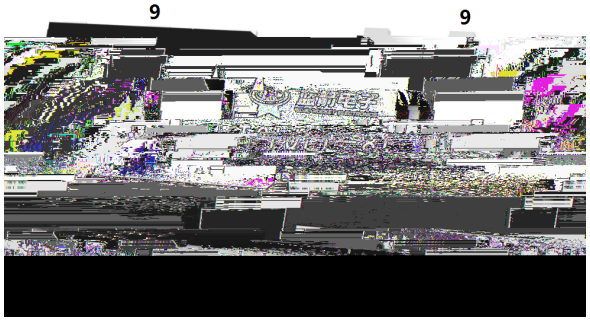
Ð ÷ / Applications

DC/DC ô E ˜o• › • ¼o• Ñ Ü k á V ñ • } Lož
DC/DC converter,Power switch,Motor drives, Meet the stringent requirements of automotive applications.

Ã W] Ô · / Equivalent Circuit



• Û - æ / Pinning



PIN1 ÖG PIN2 Ã3 Ã4 Ã5 Ã6 Ã7 Ã8 ÖS PIN9 ÖD

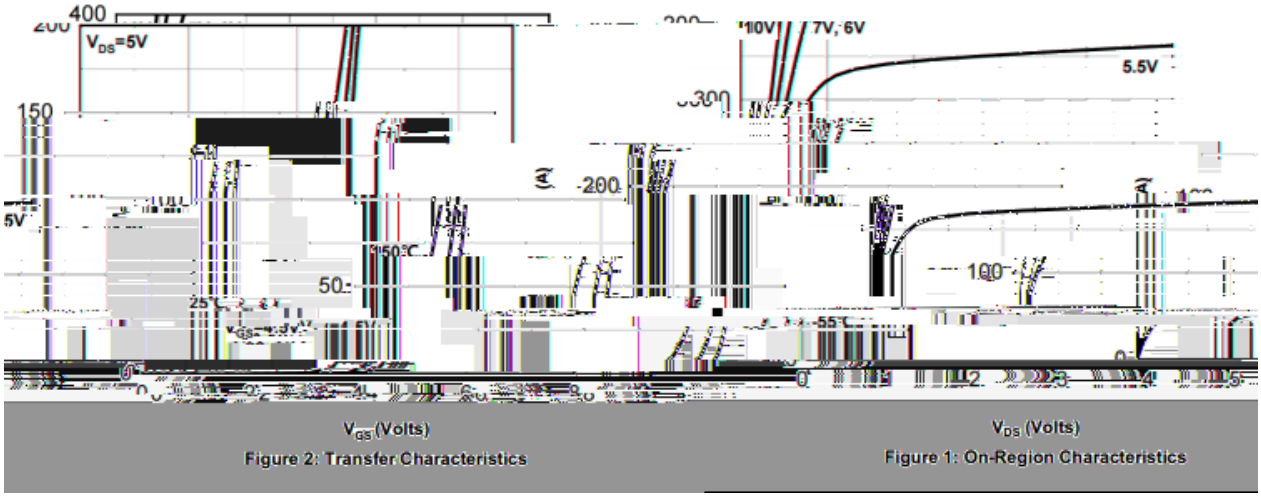
, M V / Marking

• - ~ ª ¢ož
See Marking Instructions.

Ô4ì × ? d / Electrical Characteristics(Ta=25 ;)

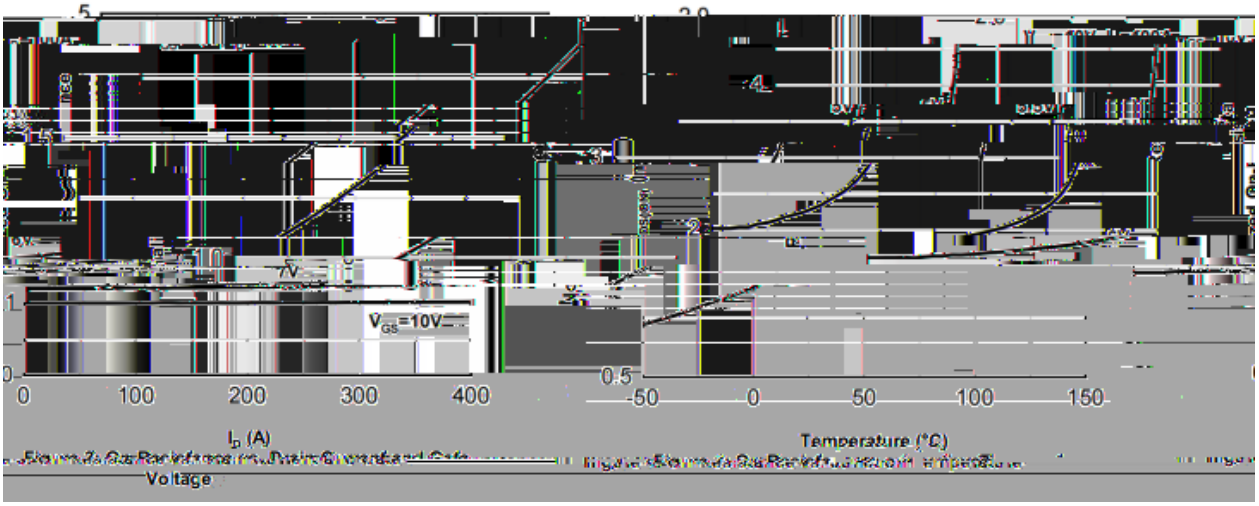
@ *f* Parameter	… Z Symbol	y ¡ Ú ^ Test Conditions	Â 4 › Min	Á º › Typ	Â Ý › Max	% y Unit
Turn-On Delay Time	$t_{d(on)}$	V_{GS}=10V V_{DS}=50V R_G=6 ¡ I_D=100A		81		ns
Turn-On Rise Time	t_r			178		
Turn-Off Delay Time	$t_{d(off)}$			167		
Turn-Off Fall Time	t_f			68		
Reverse Recovery Time	t_{rr}	I_{DS} =50A, V_{DS}=50V d_i/d_t=100 A/ - s		92		ns
Reverse Recovery Charge	Q_{rr}			200		nC

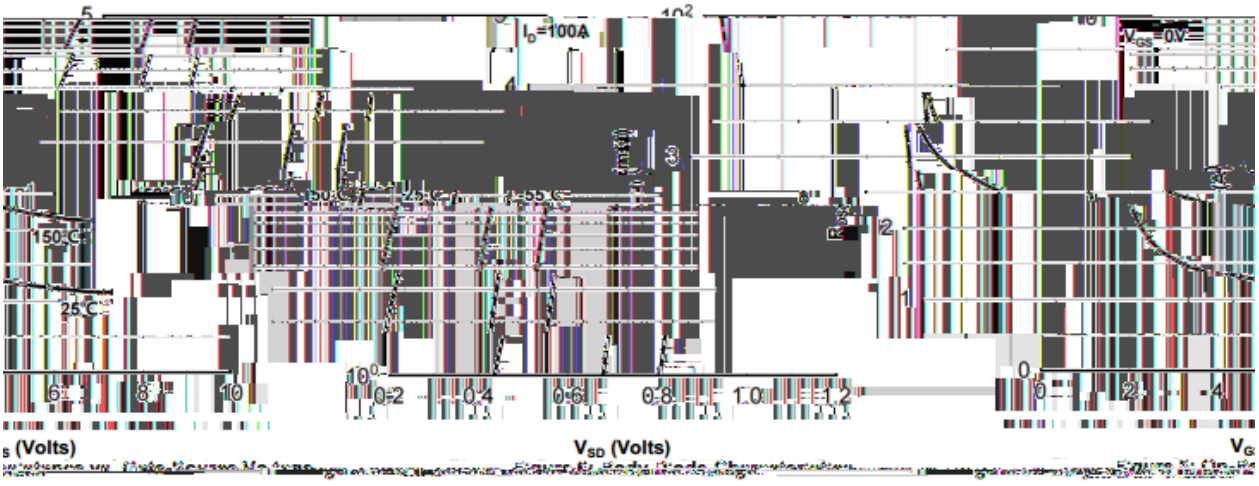
Ô ? d • Ž ¢ / Electrical Characteristic Curve



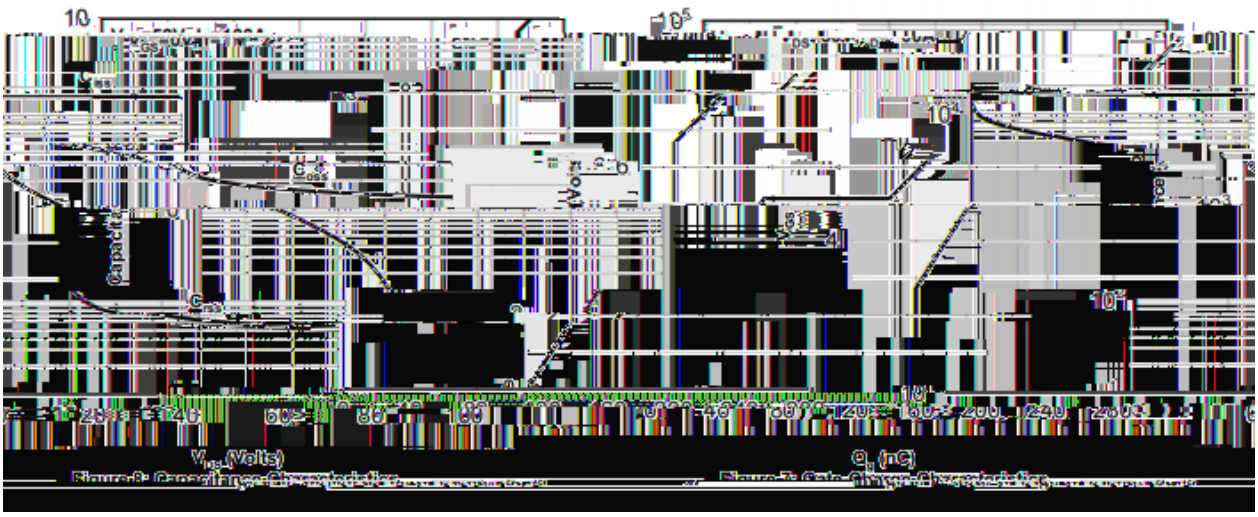
V_{GS} (Volts)
Figure 2: Transfer Characteristics

V_{DS} (Volts)
Figure 1: On-Region Characteristics





Ô ? d • Ž ¢ / Electrical Characteristic Curve



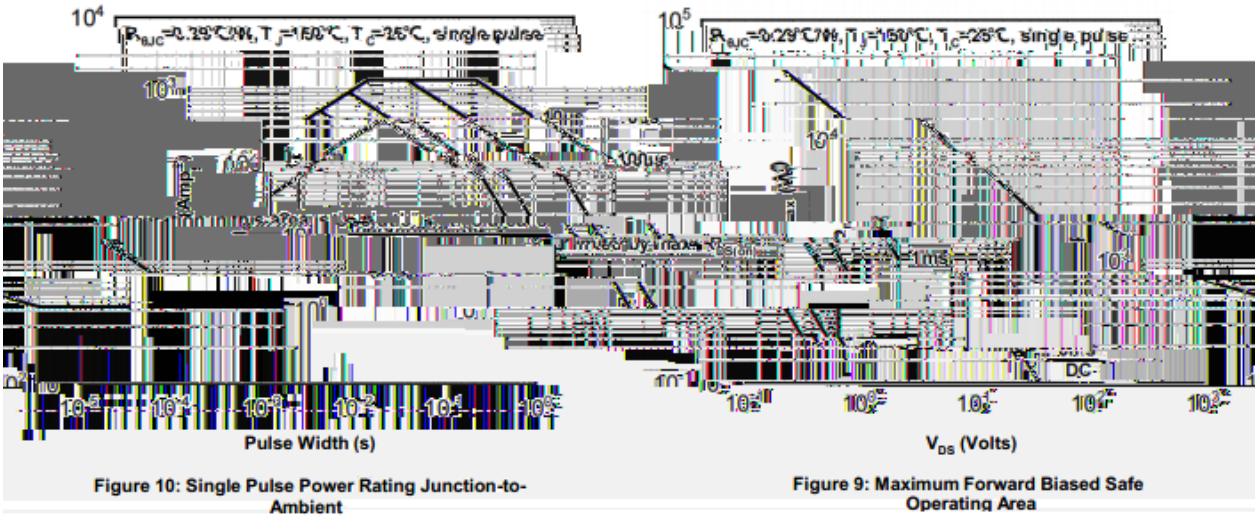
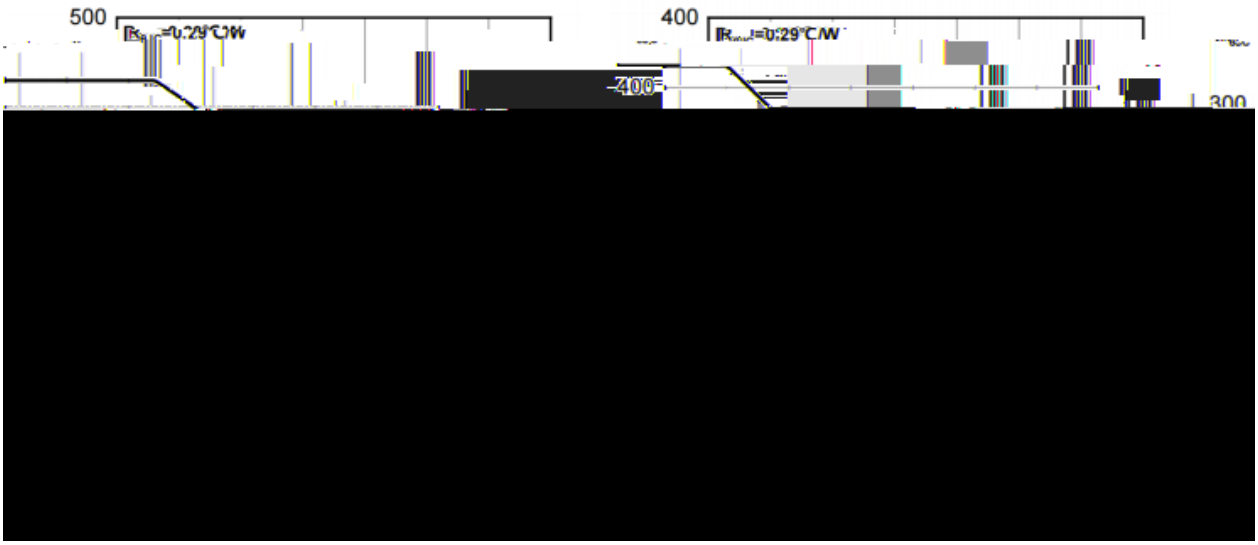


Figure 10: Single Pulse Power Rating Junction-to-Ambient

Figure 9: Maximum Forward Biased Safe Operating Area

Ô ? d • Ž ¢ / Electrical Characteristic Curve



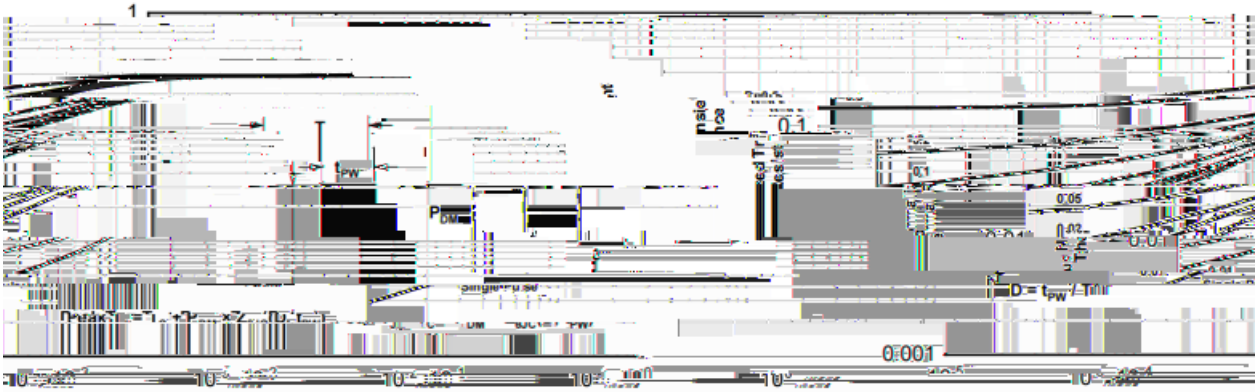
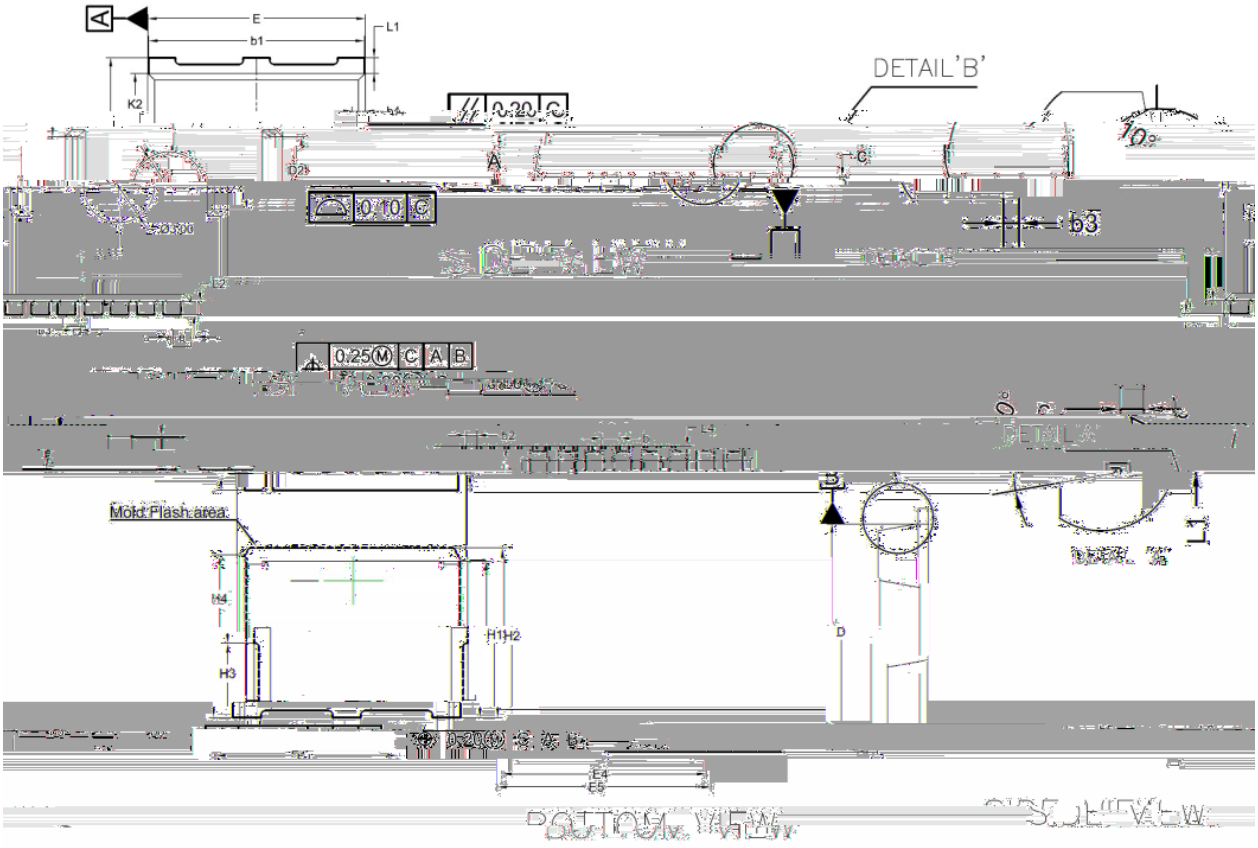


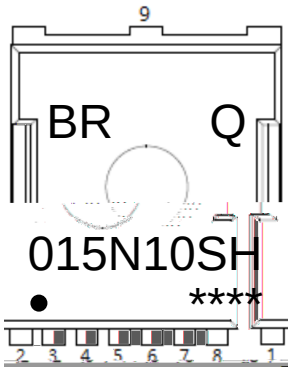
Figure 15. Normalized Maximum Transient Thermal Impedance

Ø ¤ =) ¢ / Package Dimensions



9_SHU	*OSKTYOUTY /T 3OR			9_SHU	*OSKTYOUTY /T 3OR			ROSKZKXY
	3/4	453	3'>		3/4	453	3'>	
'				H				
I				H				
*				H				
+				H				
K	(9)			H				
.				H				
.				2				
.				2				
.				2				
.				2				
1				2				
1				+				
*				+				
H				+				

, M y ƒ / Marking Instructions



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7 y V ñ —)í D } ö œ

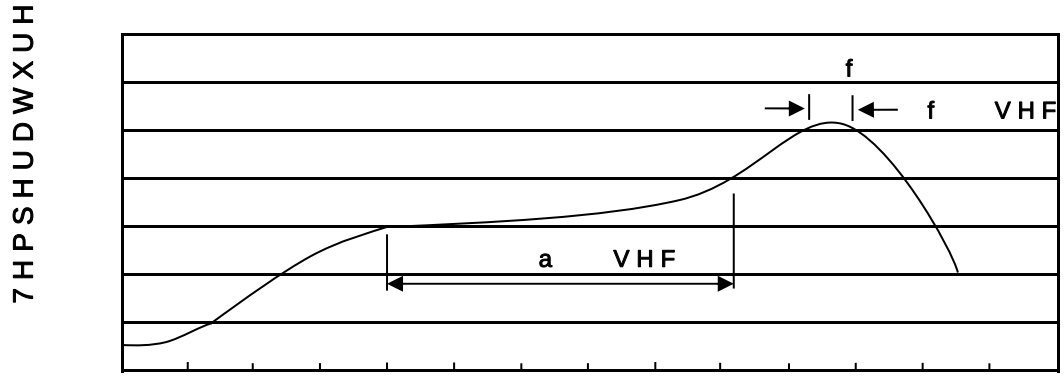
015N10SH y º Z W A

y ÿ D Z W A k š ÿ D Z J

Note y

BR y	Company Code
Q:	Automobile halogen-free product Code
015N10SH y	Product Type Code
****:	Lot No. Code, code change with Lot No.

š WD t … • Ž ¢ (x/) / :KSVKXGZ[XK 6XULORK LUX /8 8KLRU] 9URJKXOTM 6



7LPH VHF

ª ¢ 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 Ò 5 r0.5sec; 2.Peak Temp.:255 r5 - , Duration:5 r0.5sec.

3o•D N ò i Ò 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±5 Time:10±1 sec

G P á / Packaging SPEC.

2 & x / REEL

Package Type / x ¥ ”	Units ;>û ¦H					Dimension ;>û p . (unit Æmm³)		
	Units/Reel Q 2 &	Reels/Inner Box 2 & "	Units/Inner Box Q "	Inner Boxes/Outer Box " ”	Units/Outer Box Q ”	Reel	Inner Box"	Outer Box"
TOLL-8L	2,000	1	2,000	6	12,000	13”×24	360×360×50	380×335×366

„ Ð y ƒ / Notices