

Rev.B Dec.-2023

TO-220 N

N-CHANNEL MOSFET in a TO-220 Plastic Package.

$V_{DS}=100V$ $I_D=120A$

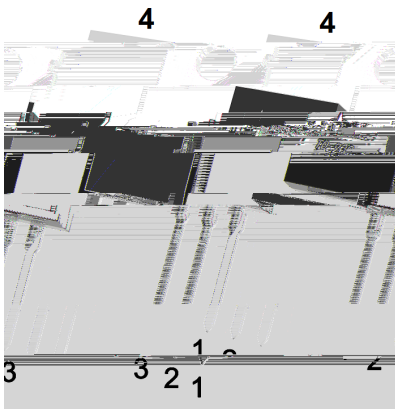
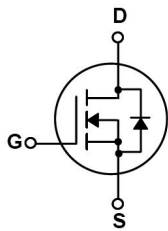
$R_{DS(on)}@10V \leq 5.5m\Omega$ (Type.4.7m Ω)

$R_{DS(on)}@4.5V \leq 7.0m\Omega$ (Type.6.0m Ω)

HF Product.

EPV

High frequency switching and synchronous rectification,BMS,Motor.



PIN1 G

PIN 2 4 D

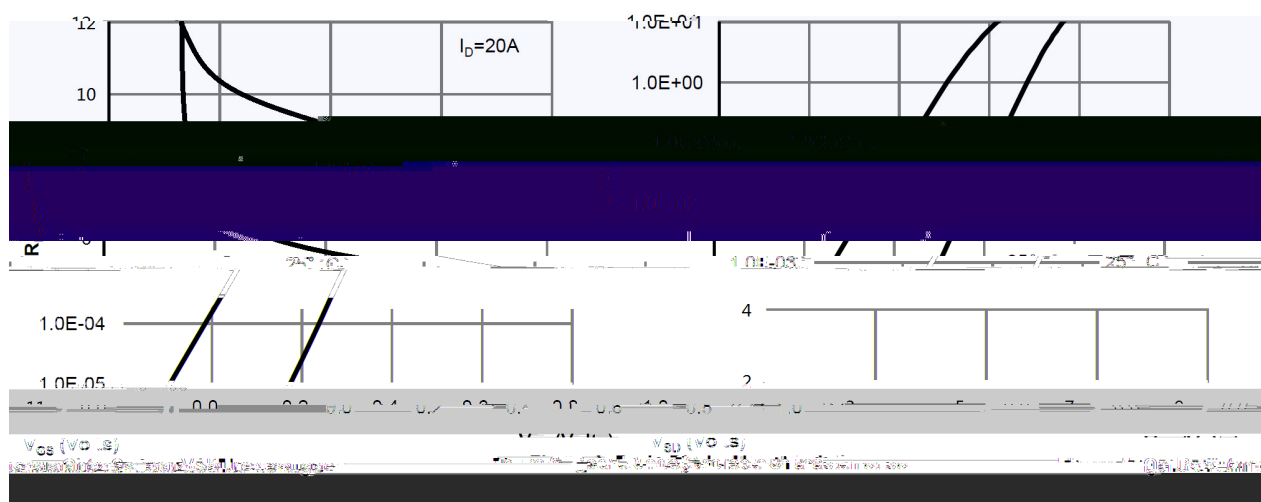
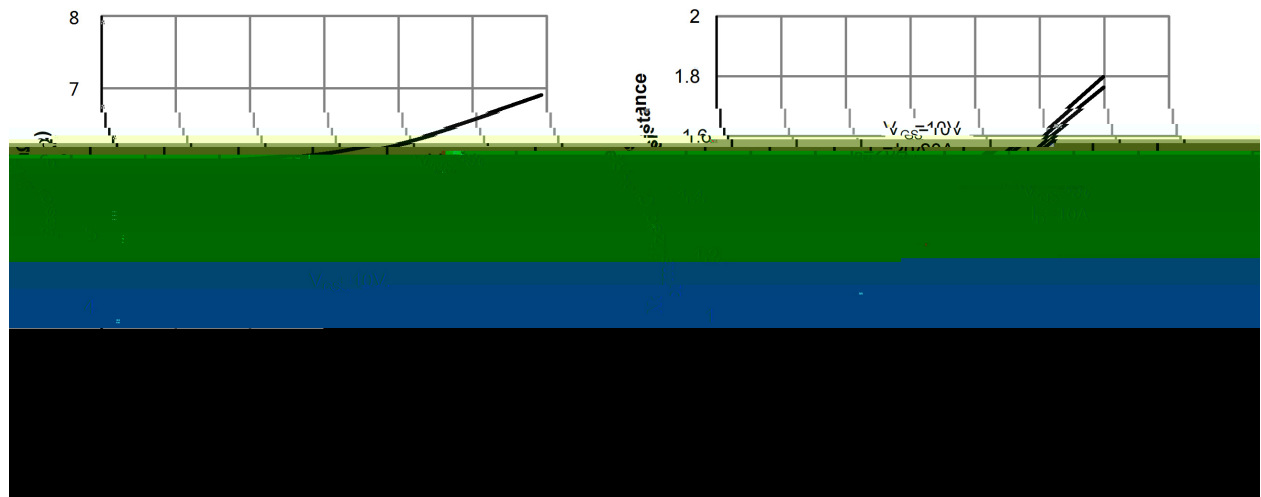
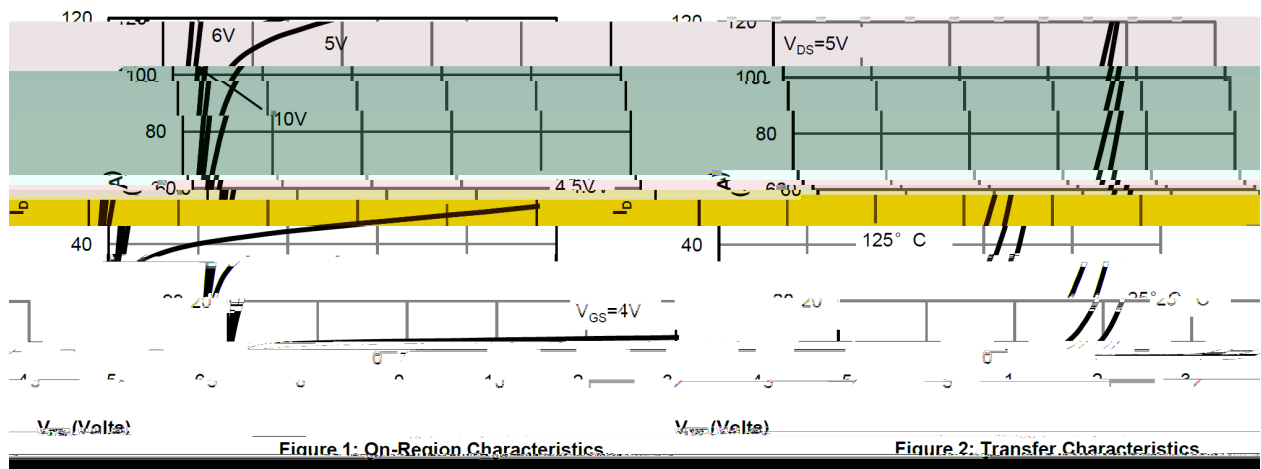
PIN 3 S

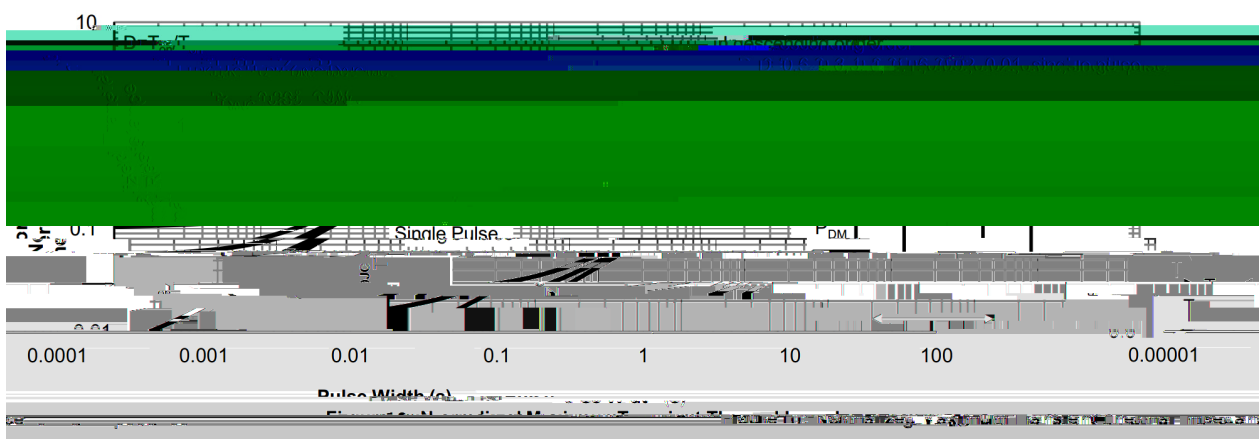
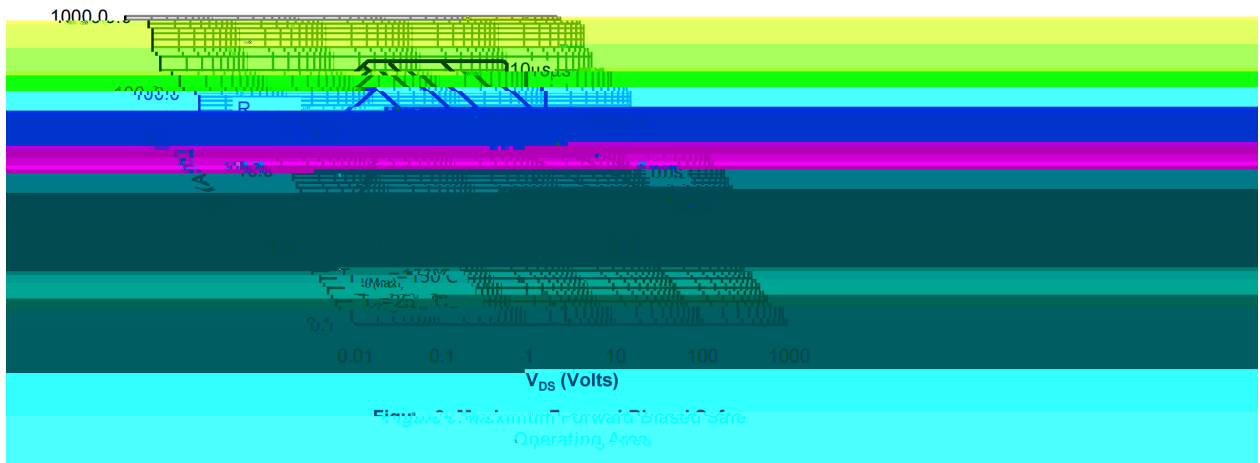
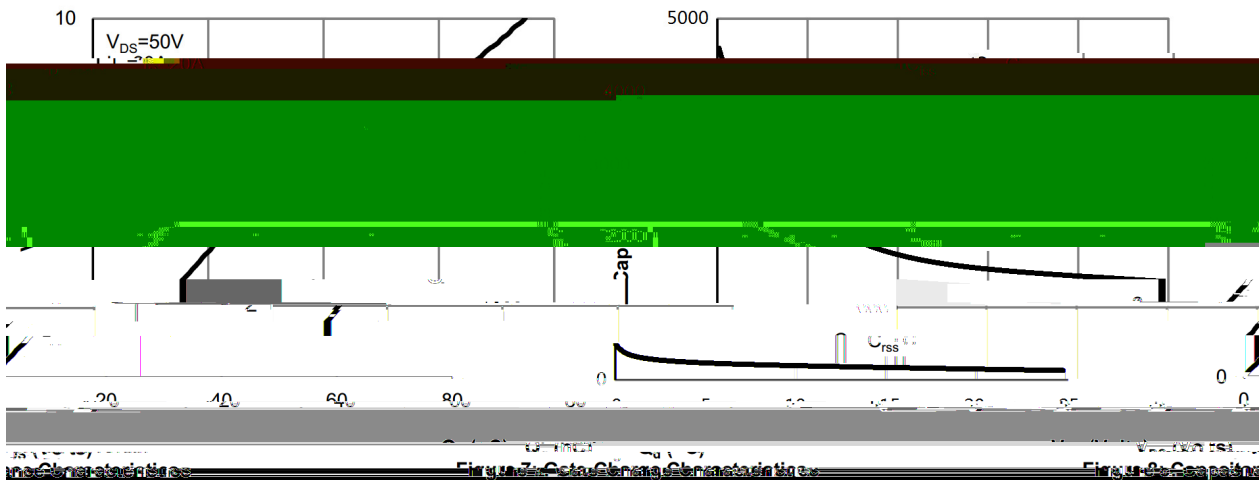
See Marking Instructions.

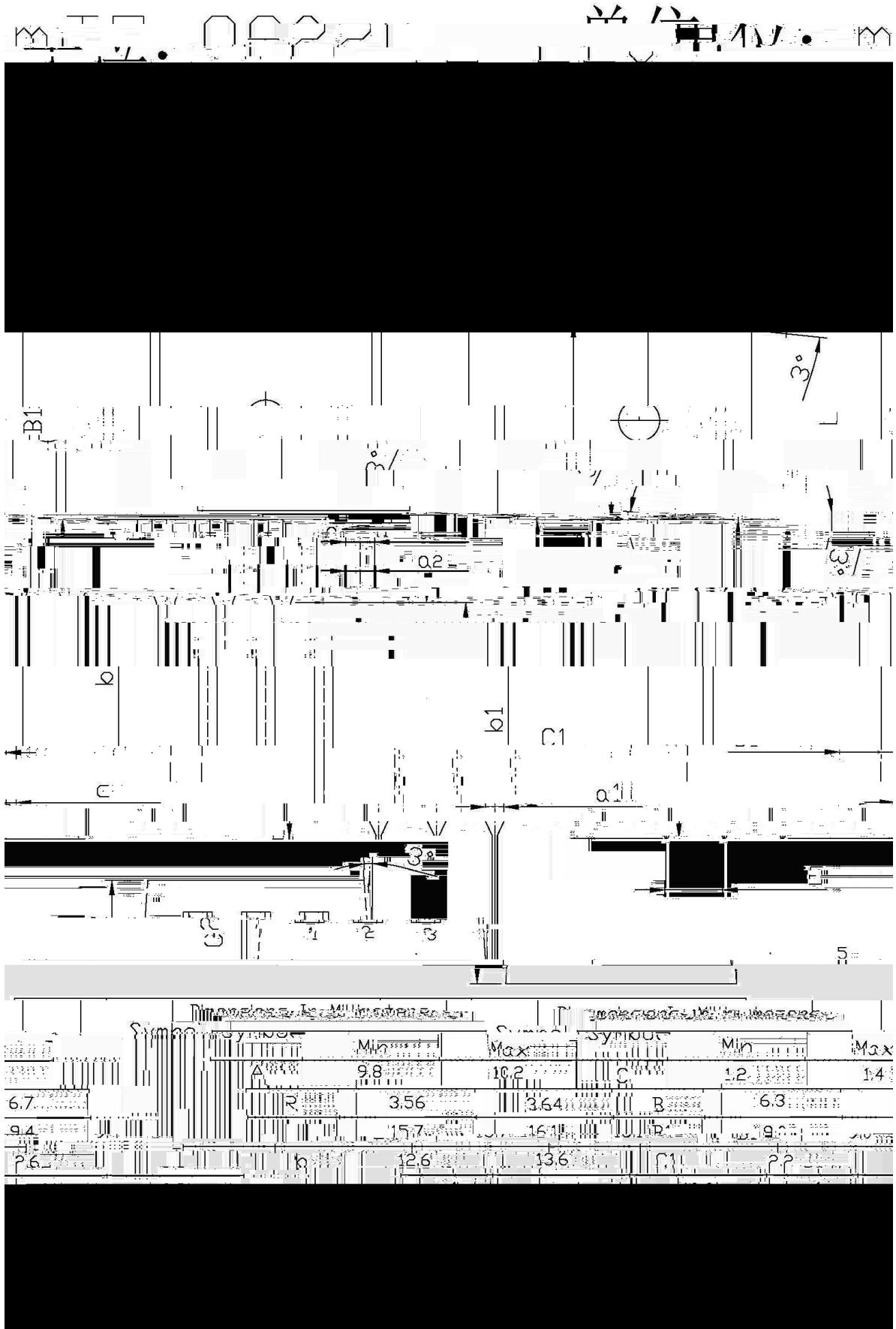
Parameter		Symbol	Rating	Unit
Drain-Source Voltage		V_{DS}	100	V
Drain Current		$I_D(T_C=25^\circ\text{C})$	120	A
Pulsed Drain Current		I_{DM}	255	A
Gate-Source Voltage		V_{GS}	± 20	V
Single Pulsed Avalanche Energy($L=0.5\text{mH}$)		E_{AS}	883.6	mJ
Avalanche Current		I_{AS}	47	A
Total Power Dissipation		$P_D(T_C=25^\circ\text{C})$	140	W
Junction and Storage Temperature Range		T_J, T_{STG}	-55 to 150	
Thermal Resistance-Junction to Ambient	$t \leq 10\text{s}$	$R_{\theta JA}$	20	$^\circ\text{C/W}$
	Steady-State		75	
Thermal Resistance-Junction to Case				

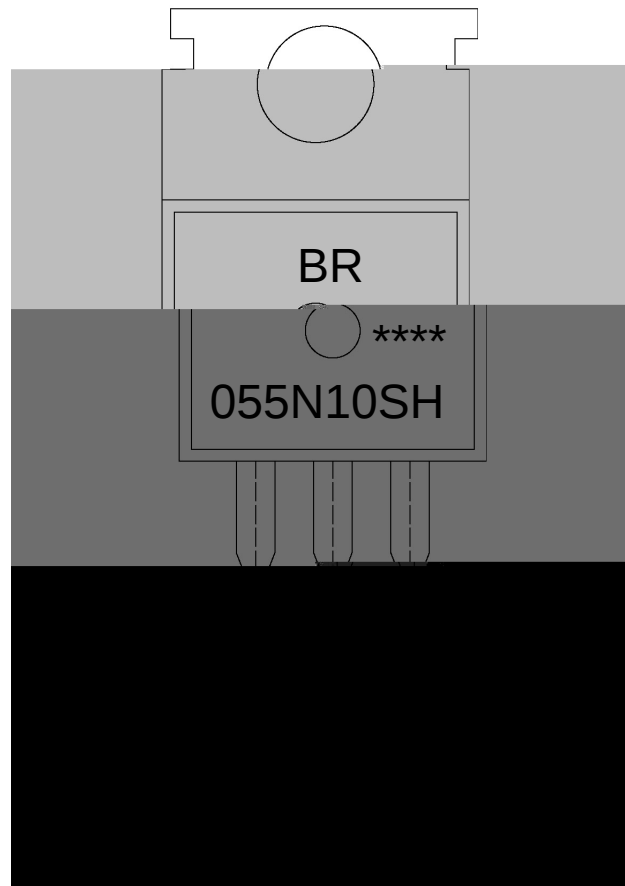
Symbol

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Turn-On Delay Time	$t_{d(on)}$	$V_{GS}=10V$ $V_{DS}=50V$ $R_L=2.5\Omega$ $R_{GEN}=3\Omega$		28.3		ns
Turn-On Rise Time	t_r			24		
Turn-Off Delay Time	t					









EU

388Q43VK

Note:

BR: Company Code

055N10SH: Product Type Code

****: Lot No. Code, code change with Lot No

- 1

25

150%

60

90sec;

2

255^{±5%}

5^{±0.5sec};

3

2

10%/sec.
- Note:
1.Preheating:25~150%, Time:60~90sec.
2.Peak Temp.:255^{±5%}, Duration:5^{±0.5sec}.
3. Cooling Speed: 2~10%/sec.

270^{±5%}

10^{±1 sec.}

Temp.:270±5

Time:10±1 sec

/ BULK

Package Type	Units					Dimension (unit mm ³)		
	Units/Bag /	Bags/Inner Box /	Units/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Bag	Inner Box	Outer Box
TO-220/F	200	10	2,000	5	10,000	135×190	237×172×102	560×245×195

/ TUBE

Package Type
Units

D291nsion

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