

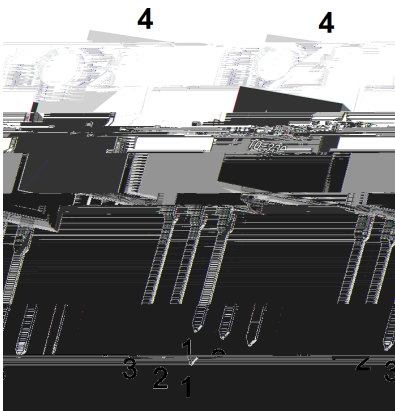
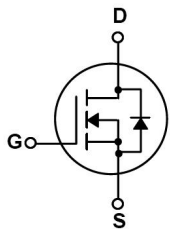
Rev.B Dec.-2023

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

$V_{DS}=100V$   $I_D=120A$   
 $R_{DS(on)}@10V$  5.5m (Type.4.7m )  
 $R_{DS(on)}@4.5V$  7.0m (Type.6.0m )  
 HF Product.

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High frequency switching and synchronous rectification, BMS, Motor.



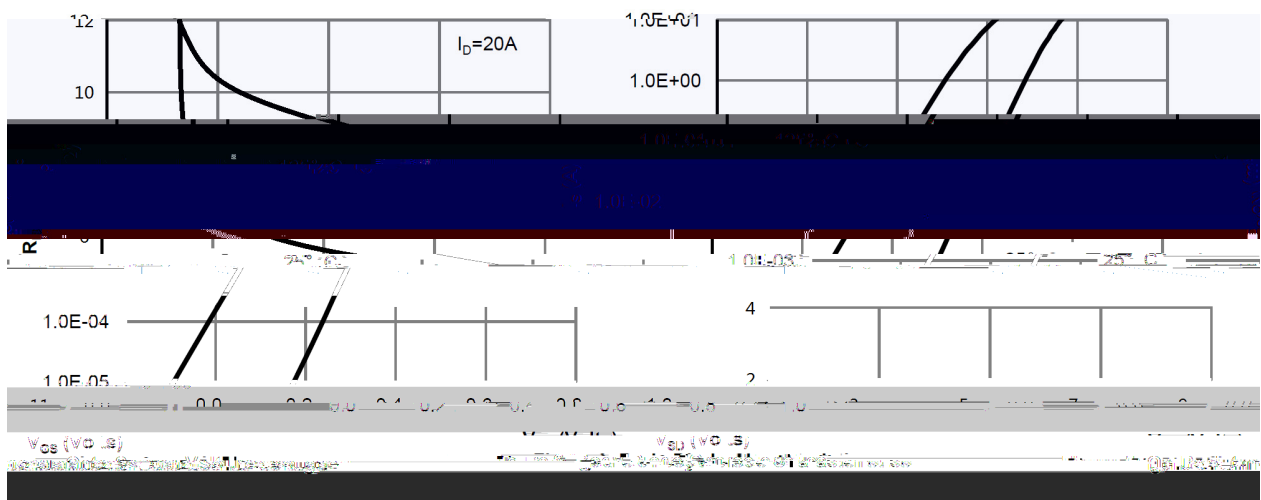
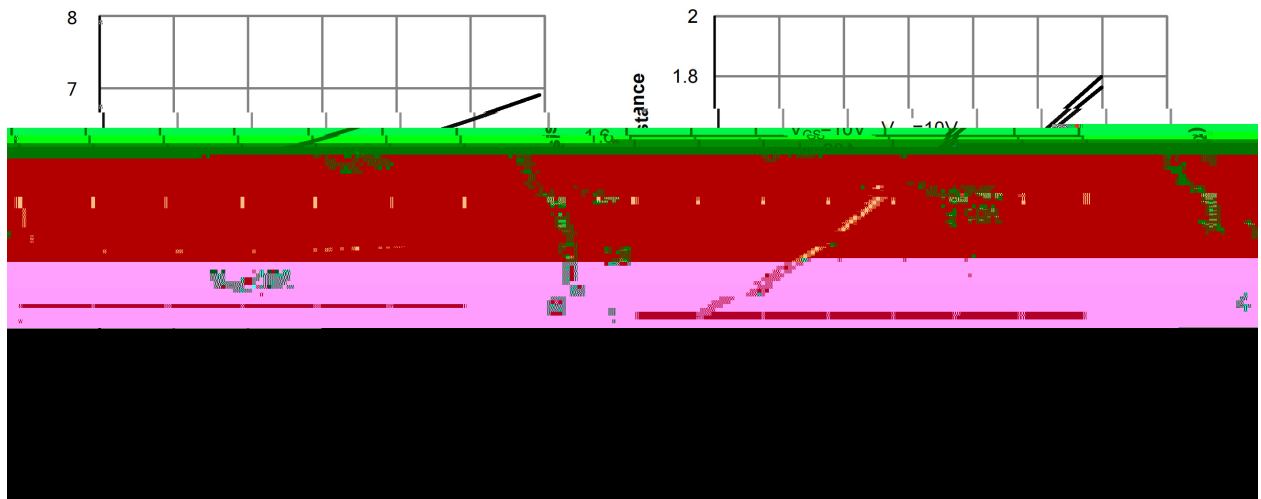
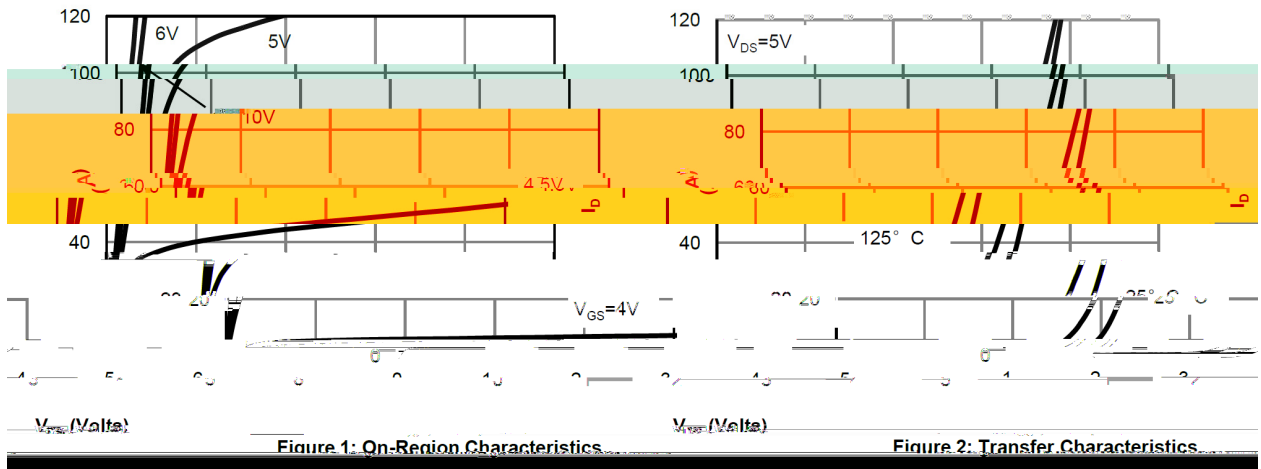
PIN 1 G      PIN 2 4 D      PIN 3 S

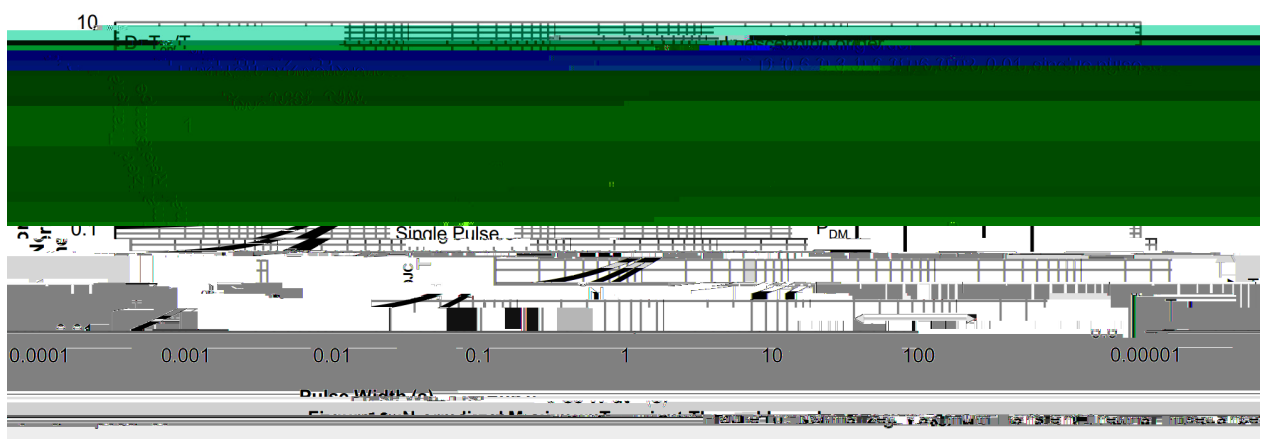
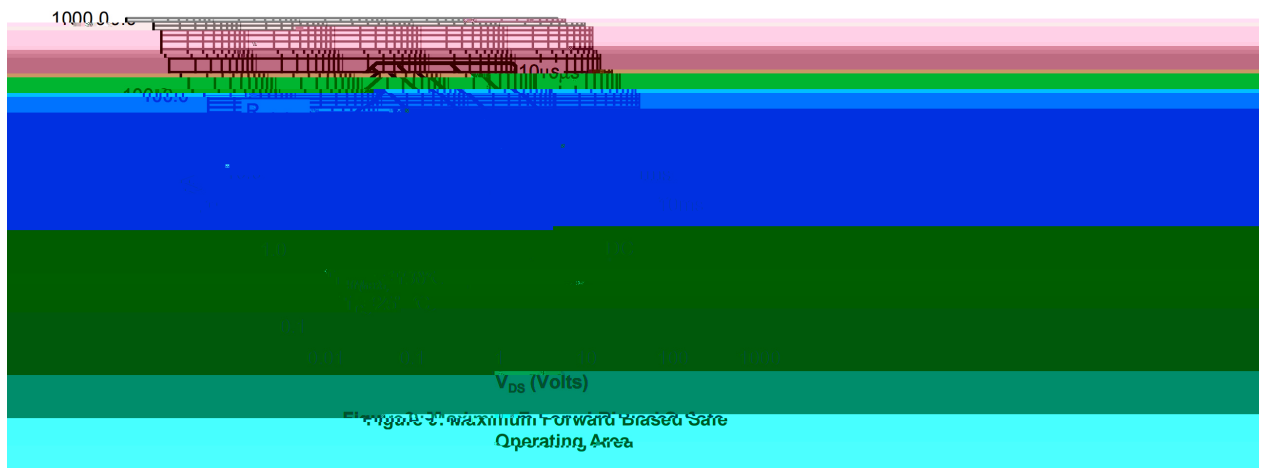
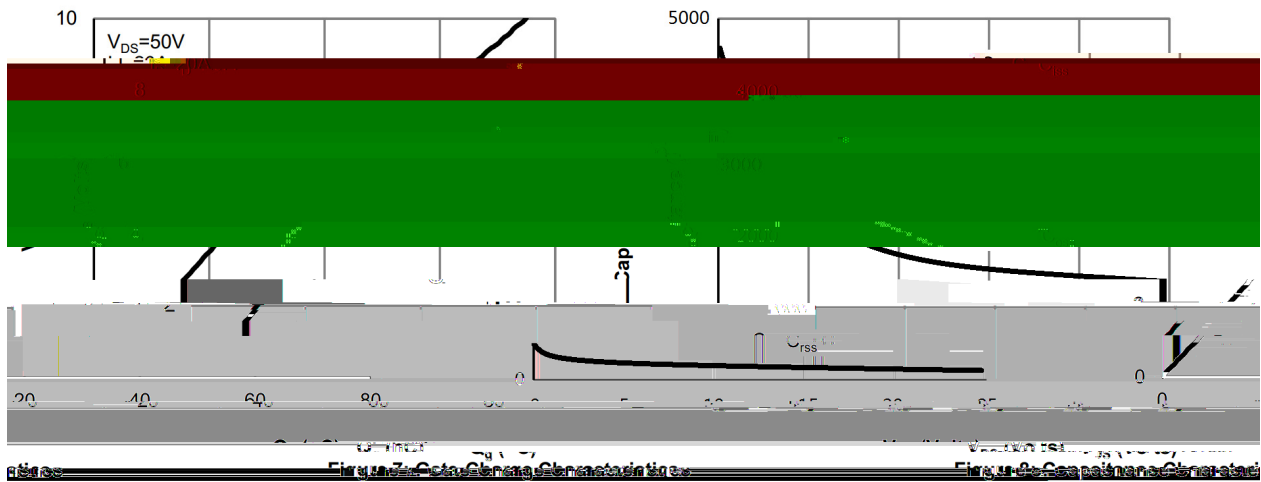
See Marking Instructions.

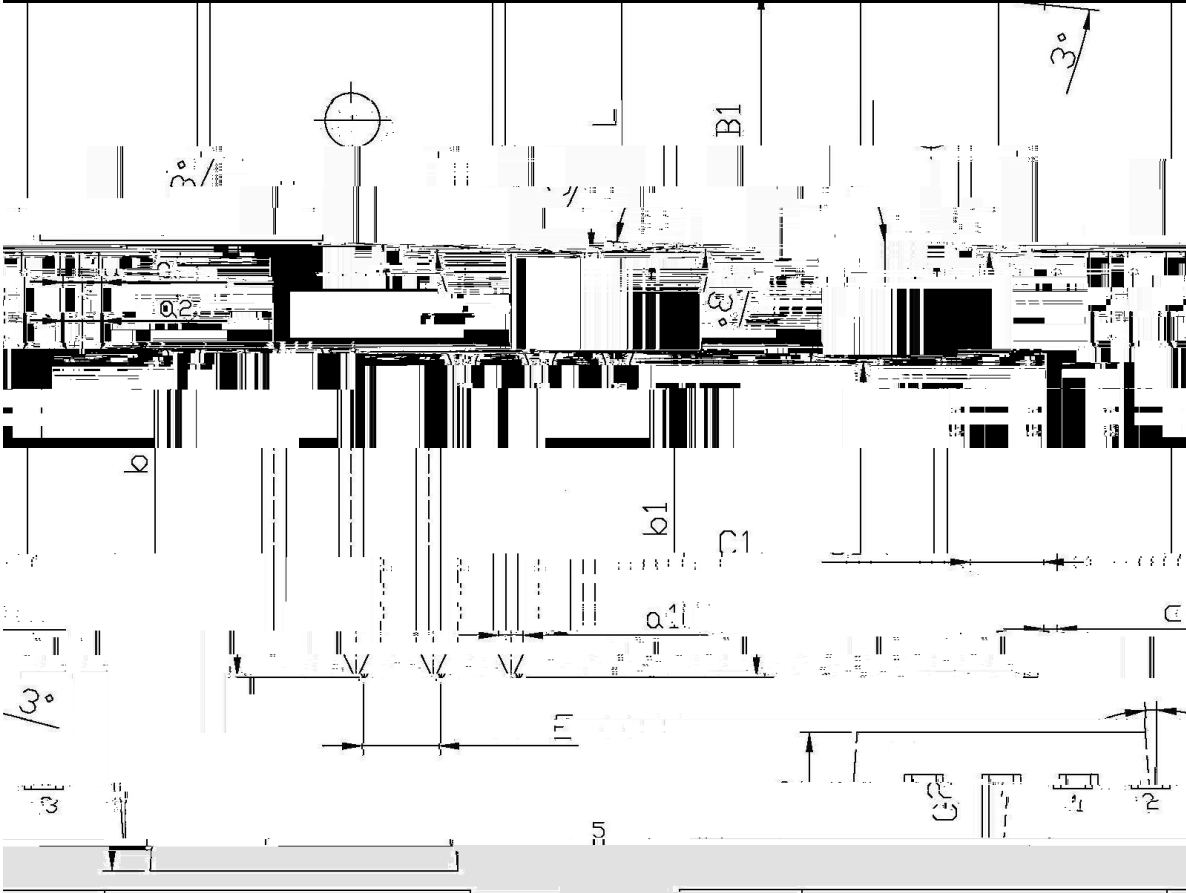
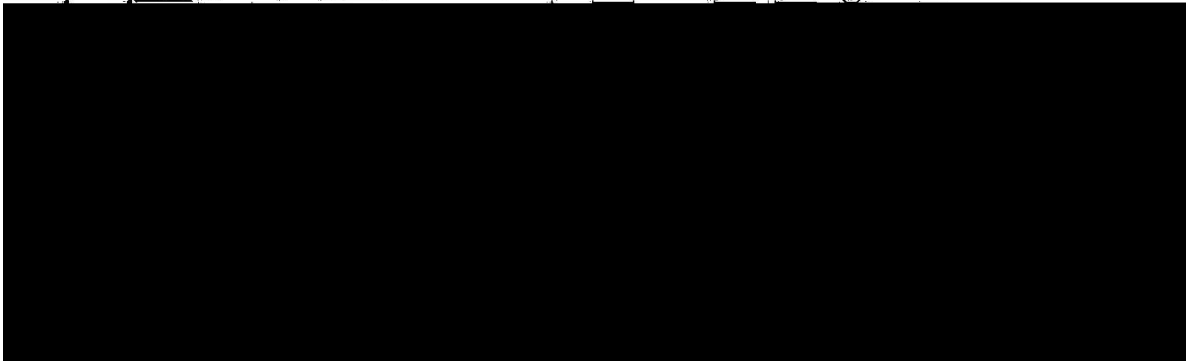
Parameter	Symbol	Rating	Unit
Drain-Source Voltage	$V_{DSS}$	100	V
Drain Current	$I_D(T_C=25^\circ\text{C})$	120	A
Pulsed Drain Current	$I_{DM}$	255	A
Gate-Source Voltage	$V_{GS}$	$\pm 20$	V
Single Pulsed Avalanche Energy(L=0.5mH)	$E_{AS}$	883.6	mJ
Avalanche Current	$I_{AS}$	47	A
Total Power Dissipation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

Symbol

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

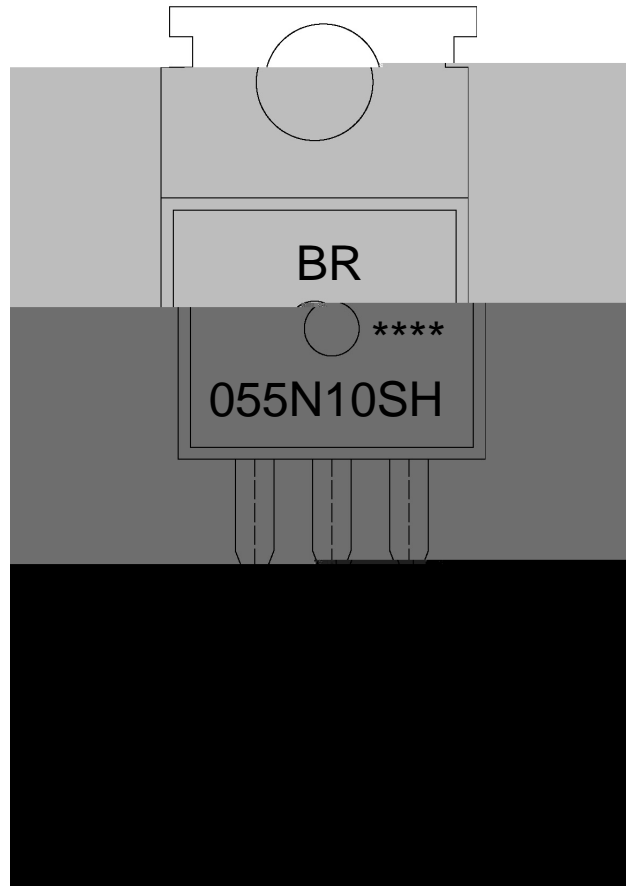






	SYMBOL	Min	Max	SYMBOL	Min	Max
6.7	A	9.8	10.2	C	1.2	1.4
9.4	R	3.56	3.64	B	6.3	
9.6	b	12.6	13.6	C1	2.0	2.2





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Note:

BR: Company Code

055N10SH: Product Type Code

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


**Note:**

- |   |        |            |   |
|---|--------|------------|---|
| 1 | 25 150 | 60 90sec;  | 1.Preheating:25~150 , Time:60~90sec.      |
| 2 | 255..5 | 5..0.5sec; | 2.Peak Temp.:255..5 , Duration:5..0.5sec. |
| 3 | 2 10   | /sec.      | 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 <sup>3</sup> )		
TO-220/F	200	10	2,000	5	10,000	135x190	237x172x102	560x245x195

/ TUBE

Package Type  
st i rU                      291mension