

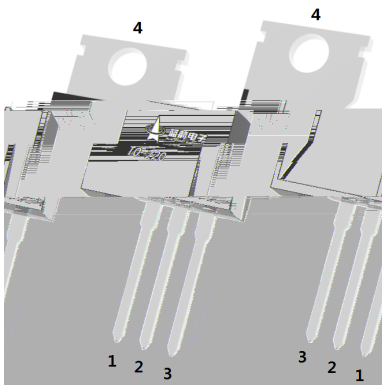
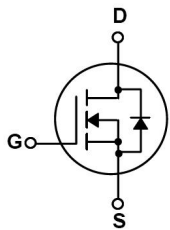
Rev.B Sep.-2022

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

Ultra Low On-Resistance,fast switching.

PFC

These devices are well suited for high efficient switched mode power supplies Active power factor correction, electronic lamp ballast based on half bridge topology.

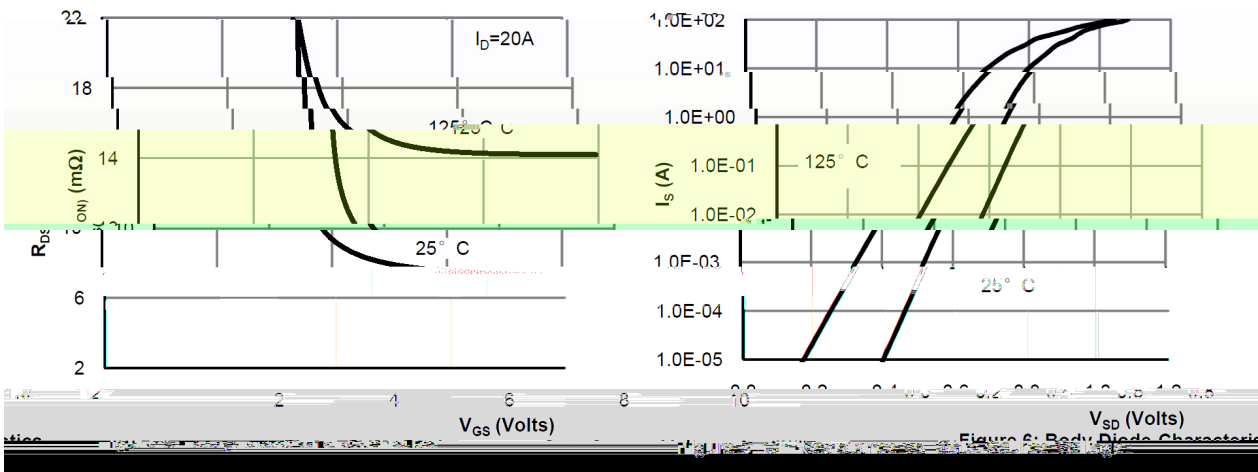
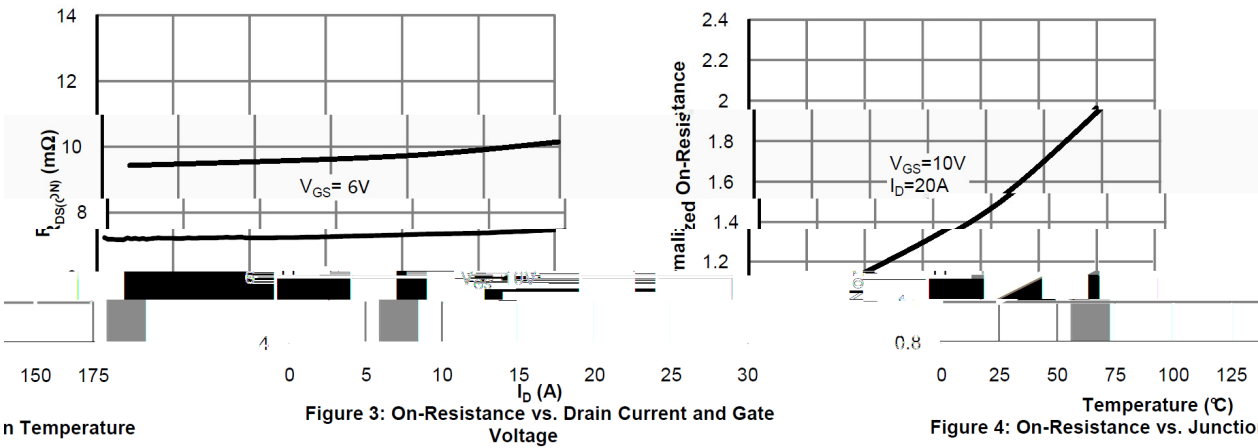
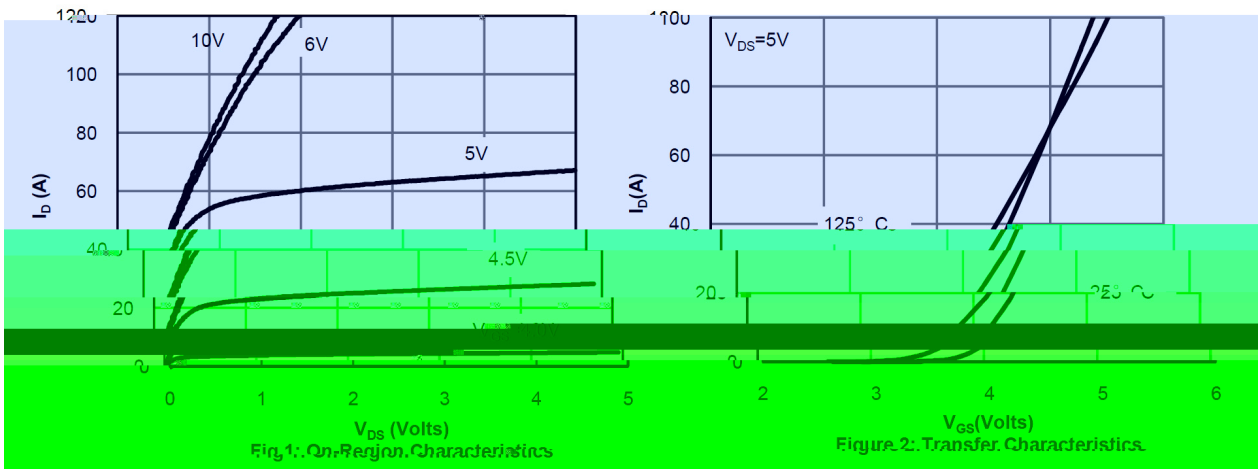


PIN1 G PIN 2 4 D PIN 3 S

See Marking Instructions.

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DSS}	100	V
Drain Current	$I_D(T_C=25^\circ\text{C})$	73	A
Pulsed Drain Current	I_{DM}	190	A
Gate-Source Voltage	V_{GS}	20	V
Single Pulsed Avalanche Energy $L=0.5\text{mH}$	E_{AS}	78.8	mJ
Avalanche Current	I_{AS}	15	A
Total Power Dissipation	$P_D(T_C=25^\circ\text{C})$	90	W
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to 150	
<div style="background-color: black; width: 50px; height: 15px; display: inline-block;"></div> Resistance-Junction to Ambient	R_{JA}	15	/W

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Total Gate Charge	$Q_g(10V)$	$V_{GS}=10V$ $V_{DS}=50V$ $I_D=20A$		37		nC
Gate Source Charge	Q_{gs}			11.5		
Gate Drain Charge	Q_{gd}			5		
Turn-On Delay Time	$t_{d(on)}$	$V_{GS}=10V$ $V_{DS}=50V$ $R_L=2.5\Omega$ $R_{GEN}=3\Omega$		13		ns
Turn-On Rise Time	t_r			8.5		
Turn-Off Delay Time	$t_{d(off)}$			29		
Turn-Off Fall Time	t_f			4		



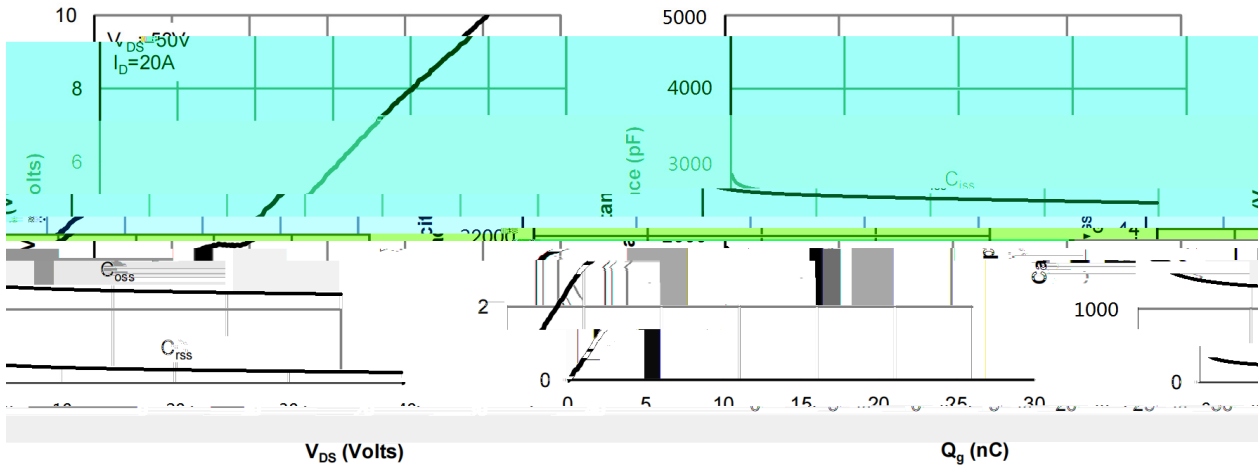
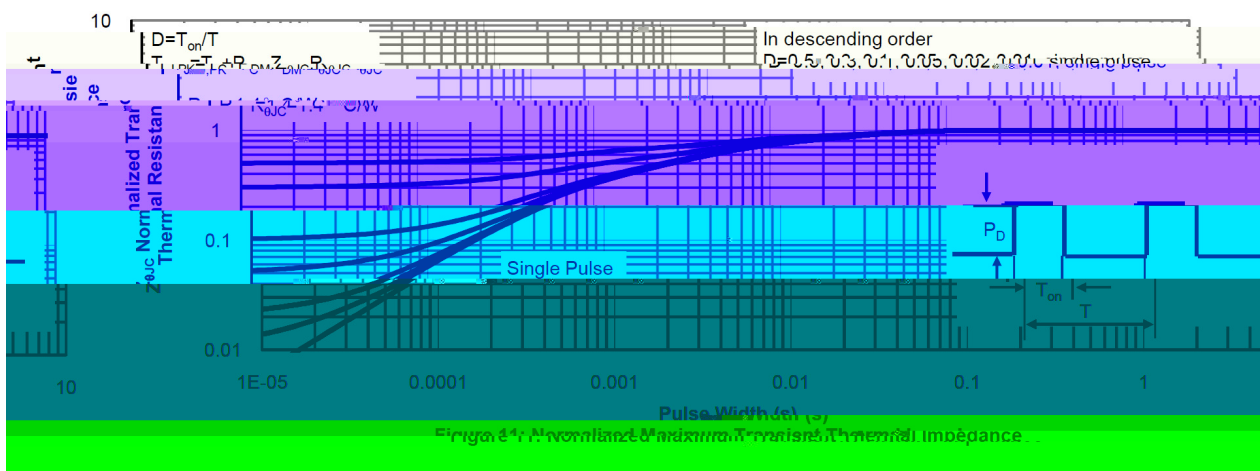
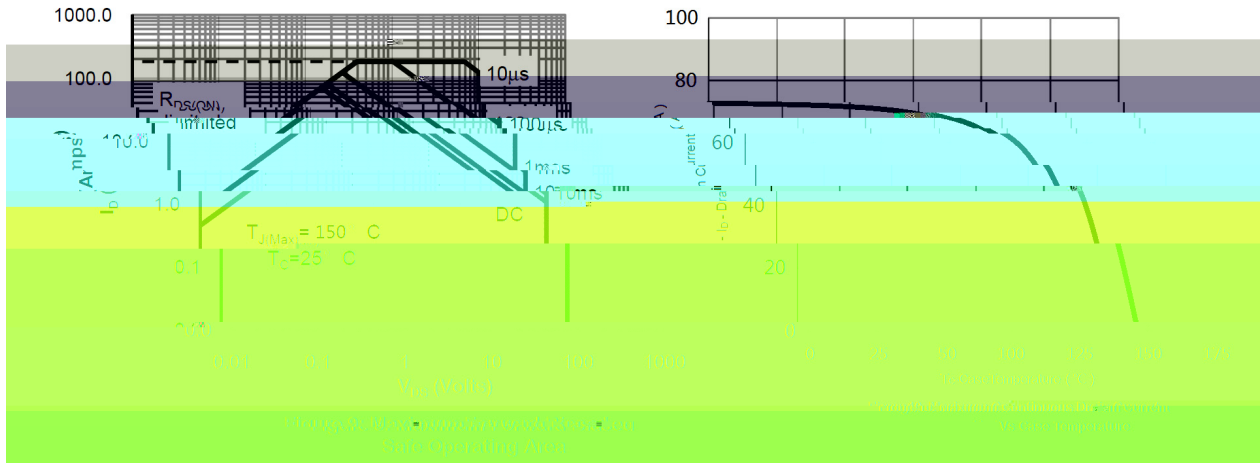


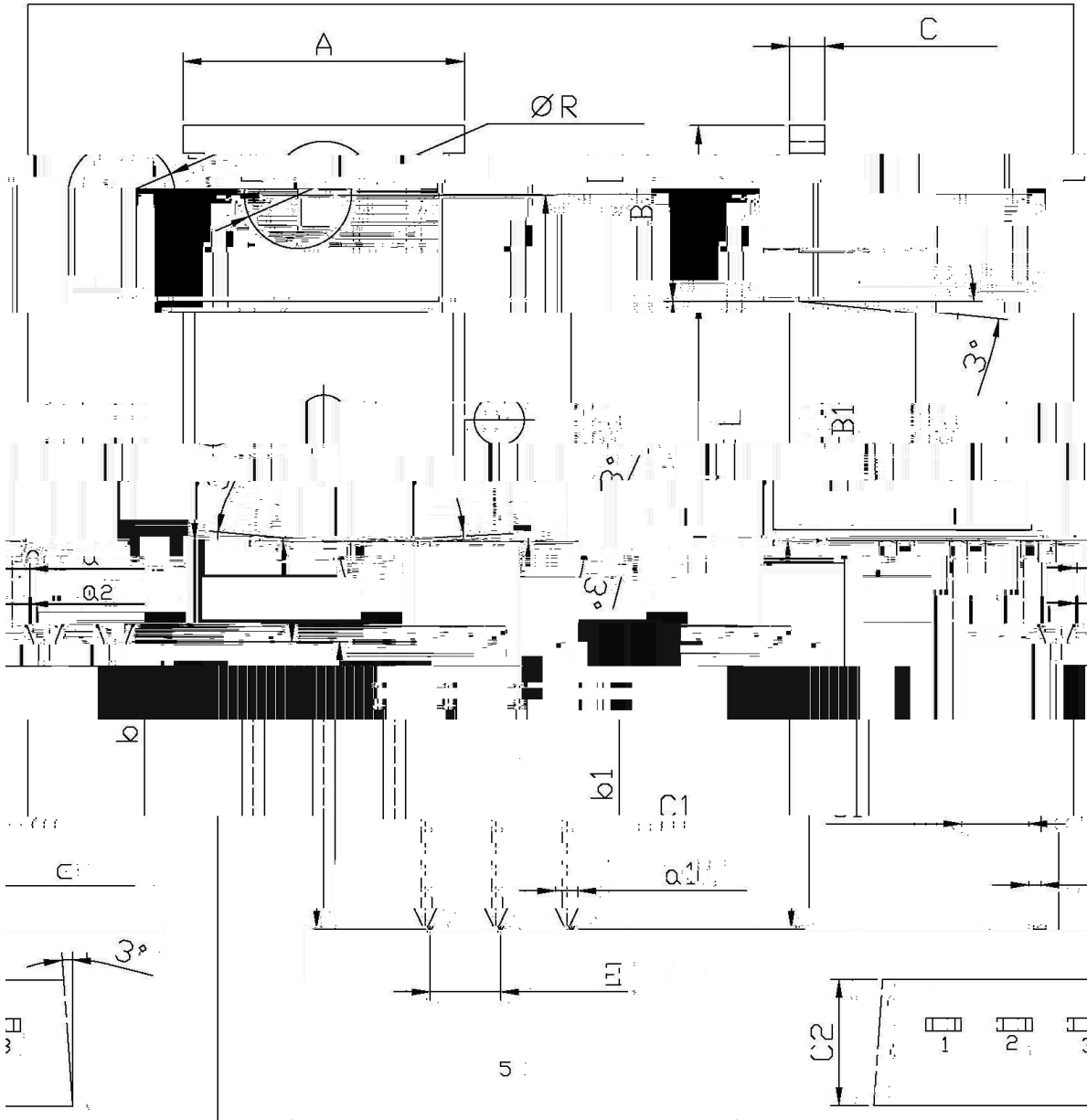
Figure 8: Capacitance Characteristics

Figure 7: Gate-Charge Characteristics

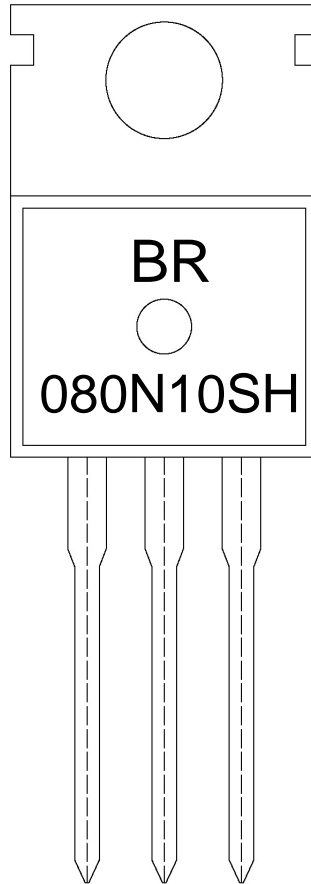


T0-220

单位: mm



Symbol	Dimensions In Millimeters		Symbol	Dimensions In Millimeters	
	Min	Max		Min	Max
A	9.8	10.2	C	1.2	1.4
R	3.56	3.64	B	6.3	6.7
L	15.7	16.1	B1	9.0	9.4
\varnothing	12.6	13.6	C1	2.2	2.6



BR

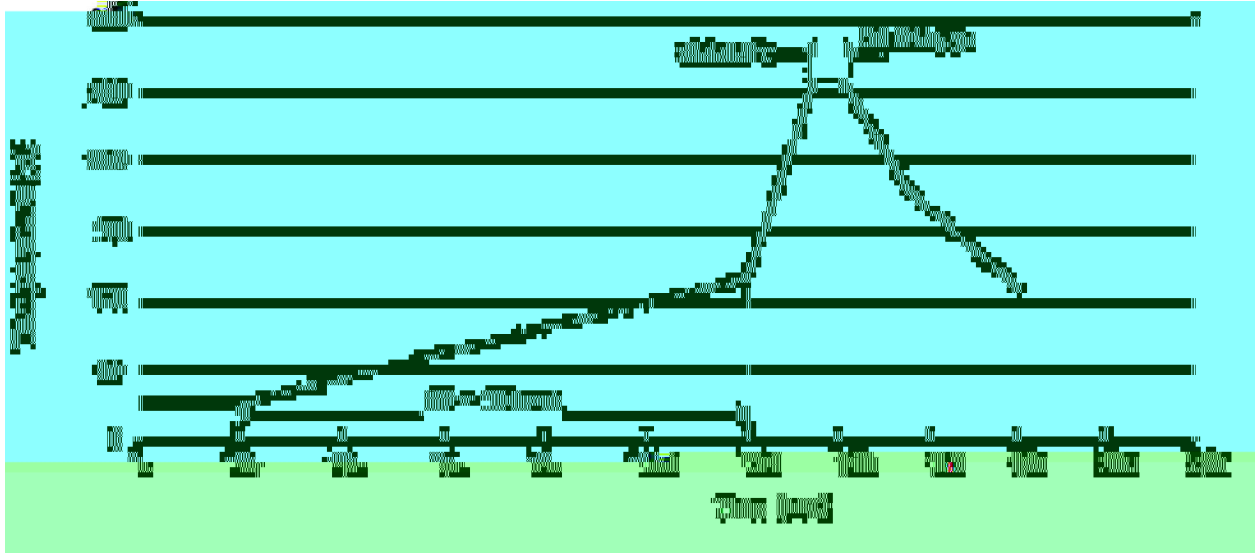
080N10SH

Note:

BR: Company Code

080N10SH: Product Type

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



1	25	150	60	90sec;	Note:	1.Preheating:25~150 , Time:60~90sec.
2	255±5		5±0.5	sec;	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 ³)
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