

BRCS26N50PA

Rev.A Jan.-2019

| Parameter | Symbol | Rating | Unit |
|----------------------|-----------|--------|------|
| Drain Source Voltage | V_{DSS} | 500 | V |

/ Electrical Characteristics(Ta=25)

| Parameter | Symbol | Test Conditions | Min | Typ | Max | Unit |
|---|--------------|--|-----|------|------|---------|
| Drain-Source Breakdown Voltage | BV_{DSS} | $V_{GS}=0V$ $I_D=250\mu A$ | 500 | | | V |
| Drain-Source Leakage Current | I_{DSS} | $V_{DS}=500V$ $V_{GS}=0V$ | | | 1 | μA |
| Gate- Source Leakage Current Forward | I_{GSSF} | $V_{DS}=0V$ $V_{GS}=+30V$ | | | +100 | nA |
| Gate-Source Leakage Current Reverse | I_{GSSR} | $V_{DS}=0V$ $V_{GS}=-30V$ | | | -100 | nA |
| Gate Threshold Voltage | $V_{GS(th)}$ | $V_{DS}=V_{GS}$ $I_D=250\mu A$ | 3.0 | | 5.0 | V |
| Static Drain-Source On-State Resistance | $R_{DS(on)}$ | $V_{GS}=10V$ $I_D=13A$ | | 0.17 | 0.2 | |
| Input Capacitance | C_{iss} | $V_{DS}=25V$ $V_{GS}=0V,$ $f=1.0MHz$ | | 3360 | | pF |
| Output Capacitance | C_{oss} | | | 280 | | |
| Reverse Transfer Capacitance | C_{rss} | | | 35 | | |
| Total Gate Charge | | $V_{GS}=10V$ $V_{DS}=400V$ $I_D=26A$ (Note 1, 2) | | 81 | 120 | nC |
| Gate to Source Charge | | | | 23 | | |
| Gate to Drain Charge | | | | 35 | | |
| | $t_{D(ON)}$ | $V_{DD}=250V$ $I_D=26A$ $R_G=25$ (Note 1, 2) | | 80 | 170 | ns |
| Rise Time | t_R | | | 2500 | 500 | |
| Turn-OFF Delay Time | $t_{D(OFF)}$ | | | 200 | 400 | |
| Fall-Time | t_F | | | 155 | 320 | |
| Maximum Body-Diode Continuous Current | I_S | | | | 26 | A |
| Maximum Body-Diode Pulsed Current | I_{SM} | | | | 104 | A |
| Drain-Source Diode Forward Voltage | V_{SD} | $I_S=26A$ $V_{GS}=0V$ | | | 1.4 | V |
| Body Diode Reverse Recovery Time | T_{rr} | $I_S=26A$ $V_{GS}=0V$ $dI_F/dt=100A/\mu s$ (Note 1) | | 530 | | ns |
| Body Diode Reverse Recovery Charge | Q_{RR} | | | 8.2 | | μC |

1. $300\mu s$ 2%

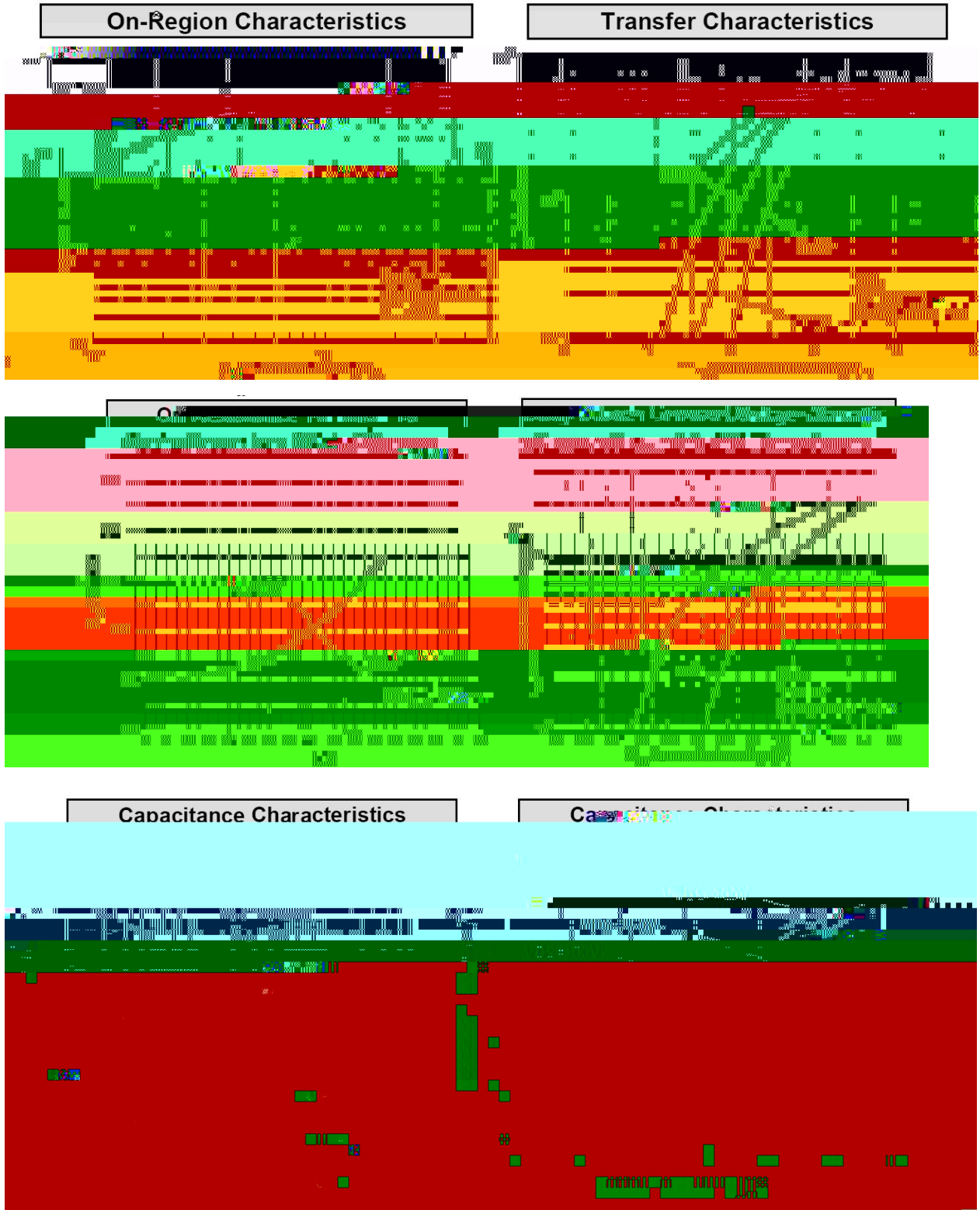
2.

ote:

1. Pulse Test: Pulse width $300\mu s$, Duty cycle 2%.

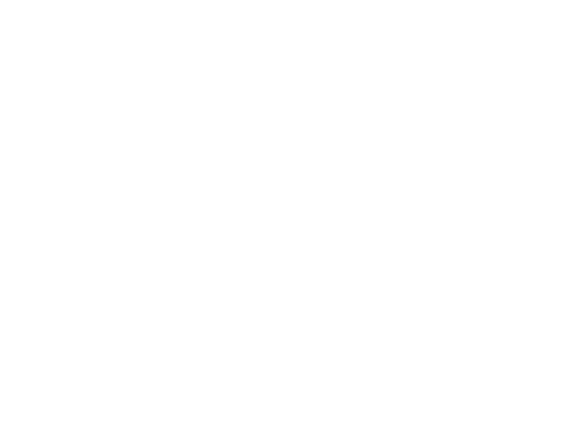
2. Essentially independent of operating temperature.

/ Electrical Characteristic Curve

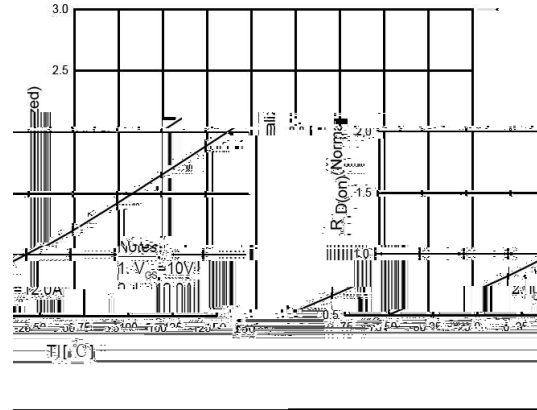


/ Electrical Characteristics(Ta=25)

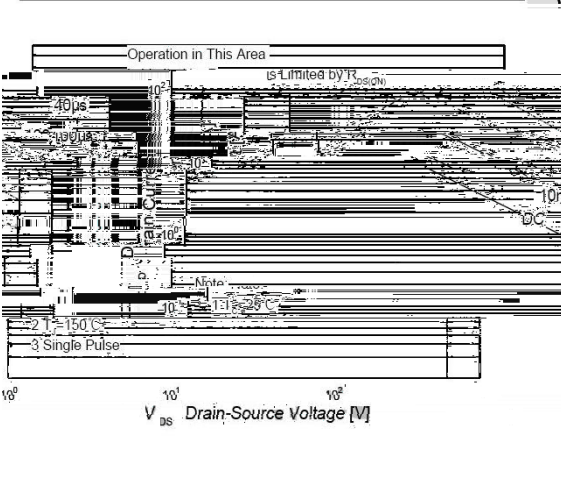
Breakdown Voltage Variation



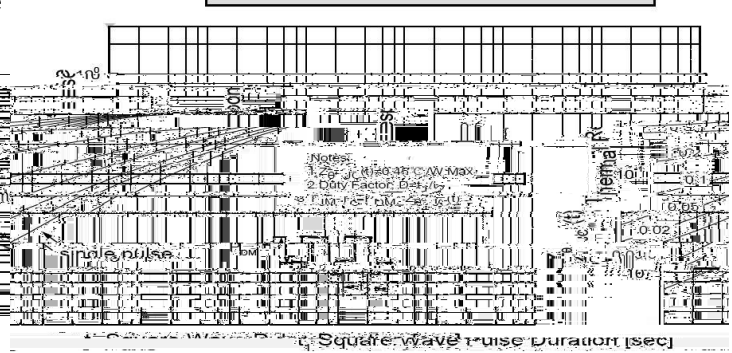
On-Resistance Variation vs. Temperature



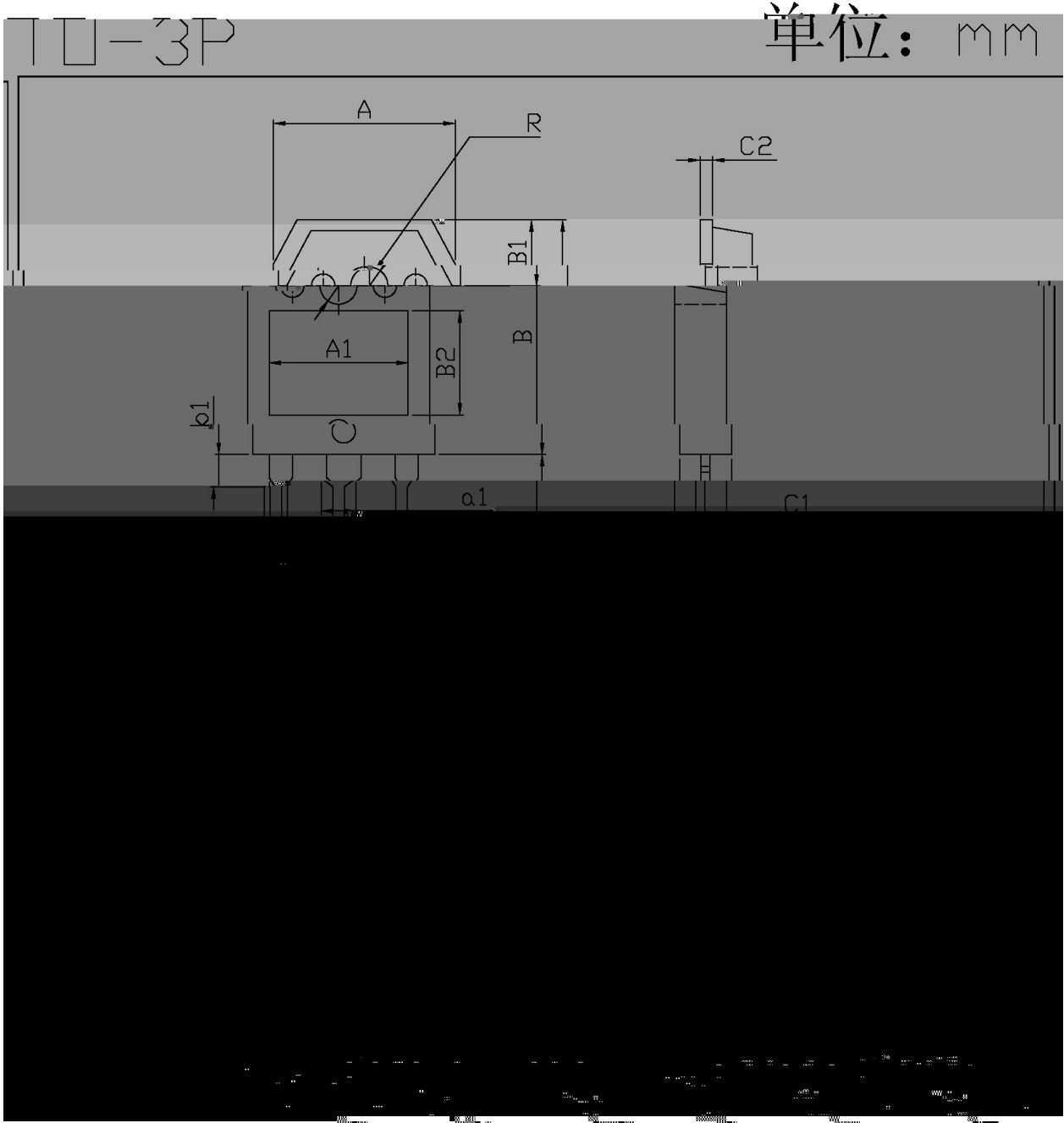
Maximum Safe Operating Area



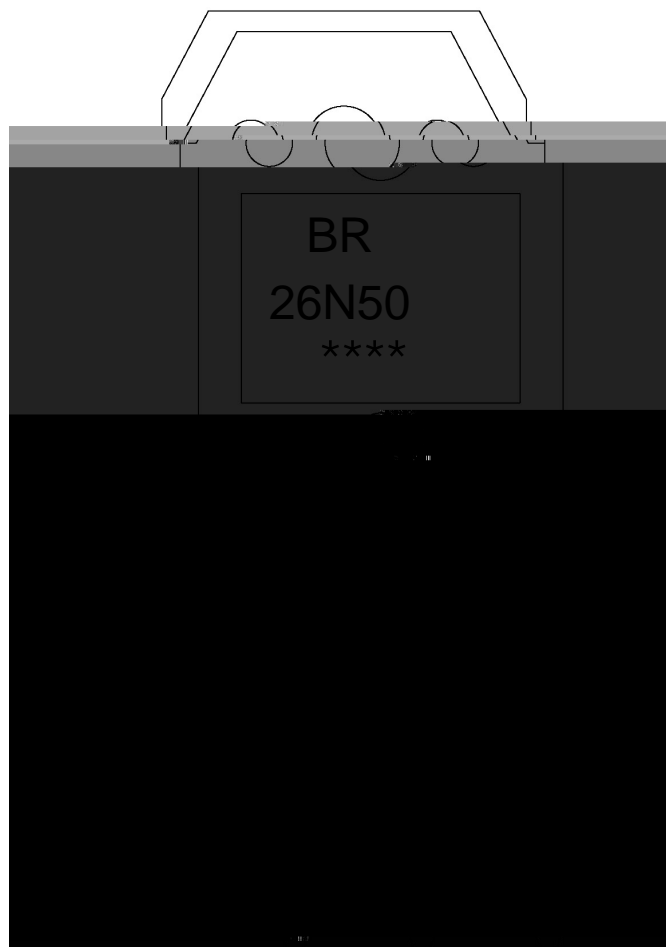
Transient Thermal Response Curve



/ Package Dimensions



/ Marking Instructions



BR:

26N50

Note:

BR: Company Code.

26N50: Product Type.

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

() / Temperature Profile for Dip Soldering(Pb-Free)



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. |

/ Resistance to Soldering Heat Test Conditions

270±5 10±1 sec. Temp:270±5 Time:10±1 sec

/ Packaging SPEC.

/ TUBE

| Package Type 封装形式 | Units 包装数量 | | | | | Dimension 包装尺寸 (unit: mm ³) | | |
|----------------------|--------------------|-------------------------|------------------------|------------------------------|------------------------|---|-------------|-------------|
| | Units/Tube 只/套管 | Tubes/Inner Box 套管/盒 | Units/Inner Box 只/盒 | Inner Boxes/Outer Box 盒/箱 | Units/Outer Box 只/箱 | Tube 套管 | Inner Box 盒 | Outer Box 箱 |