|  | BJA-SA SINGLE OUTP |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} \text { Specifications<AC/DC> } \\ \text { BJA**SA } \\ \text { 25WATTS/SINGLE } \\ \hline \end{gathered}$ | Model |  |  |  |  |  |  |
|  | BJA3.3SA-U | BJA05SA-U |  | BJA12SA-U | BJA15SA-U | BJA24SA-U | BJA48SA-U |
| Input Characteristic |  |  |  |  |  |  |  |
| Input Voltage | AC100-115V |  |  |  |  |  |  |
| Input Range | AC85-132V(DC110-175V) |  |  |  |  |  |  |
| Input Frequency | $50 / 60 \mathrm{~Hz}$ |  |  |  |  |  |  |
| Input Frequency Range | $47-440 \mathrm{~Hz}$ |  |  |  |  |  |  |
| Phase | Single |  |  |  |  |  |  |
| Inrush Current *1 | 15A(typical) at AC100V |  |  |  |  |  |  |
| Efficiency [\%] (typical) $* 2$ | 78 |  | 80 | 85 | 86 | 85 | 87 |
| Specifications<AC/DC> <br> BJA**SA <br> 25WATTS/SINGLE | Model |  |  |  |  |  |  |
|  | BJA3.3 | A-U | BJA05SA-U | BJA12SA-U | BJA15SA-U | BJA24SA-U | BJA48SA-U |
| Output Voltage [V] | 3.3 |  | 5 | 12 | 15 | 24 | 48 |
| Output Current [A] | 5 |  | 5 | 2.1 | 1.7 | 1.1 | 0.55 |
| Voltage Adjust Range | not available |  |  |  |  |  |  |
| Ripple and Noise [mVp-p](maximum) *3 | 10 |  | 150 | 220 | 250 | 340 | 580 |
| Regulation |  |  |  |  |  |  |  |
| a.Statistic Line Regulation [mV](maximum) | 26 |  | 40 | 96 | 120 | 192 | 384 |
| b.Statistic Load Regulation [mV](maximum) | 30 |  | 45 | 108 | 135 | 216 | 432 |
| c.Temperature Coefficient *4 | $0.03 \% /{ }^{\circ} \mathrm{C}$ |  |  |  |  |  |  |
| d.Drift[mV](maximum) *5 | 32 |  | 40 | 45 | 60 | 75 | 90 |
| Rise up time | 200 mS (maximum) at $25^{\circ} \mathrm{C}$ and rated input/output |  |  |  |  |  |  |
| Hold up time | 20 mS (typical) at $25^{\circ} \mathrm{C}$ and rated input/output |  |  |  |  |  |  |
| Functions |  |  |  |  |  |  |  |
| Overcurrent Protection | Foldback/Current Limiting with automatic recovery at discontinous short circuit conditio |  |  |  |  |  |  |
| Overvoltage Protection $>=115 \%$ of Rated Output Voltage[V] | Output Voltage Limiting(not for continous operating) |  |  |  |  |  |  |
| Remote Sense | not available |  |  |  |  |  |  |
| Environmental |  |  |  |  |  |  |  |
| Operating Temperature | -10 to $71{ }^{\circ} \mathrm{C}$ |  |  |  |  |  |  |
| (derating) | $3.5 \% /^{\circ} \mathrm{C}\left(50^{\circ} \mathrm{C}\right.$ to $\left.71^{\circ} \mathrm{C}\right)$ (out of warranty on/over $71{ }^{\circ} \mathrm{C}$ ) |  |  |  |  |  |  |
| Operating Humidity | 20 to $90 \% \mathrm{RH}$ (non-condensing) |  |  |  |  |  |  |
| Storage Temperature | -20 to $+85^{\circ} \mathrm{C}$ |  |  |  |  |  |  |
| Storage Humidity | 10 to $90 \% \mathrm{RH}$ (non-condensing) |  |  |  |  |  |  |
| Withstanding Voltage | $\begin{gathered} \hline \text { Primary-Secondary AC1,500V for } 1 \text { minute at } 10 \mathrm{~mA} \\ \text { Primary-Frame Ground AC } 1,500 \mathrm{~V} \text { for Iminute at } 10 \mathrm{~mA} \\ \hline \end{gathered}$ |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  | Secondary-Frame Ground AC1,000V for 1minute at 10 mA |  |  |  |  |  |  |
| Isolation Resistance | Primary-Secondary-Frame Ground 50MOhm(minimum) by DC500V insulation tester |  |  |  |  |  |  |
| Vibration | $5-10 \mathrm{~Hz}: 10 \mathrm{~mm}$ double amplitude, $10-55 \mathrm{~Hz}: 19.6 \mathrm{~m} / \mathrm{s}^{2}, 20$ minutes' period for 60 minutes each along $\mathrm{X}, \mathrm{Y}, \mathrm{Z}$ axes(non-operating) |  |  |  |  |  |  |
| Shock | 196m/s ${ }^{\text {a }}$ |  |  |  |  |  |  |
| Cooling | Convection |  |  |  |  |  |  |
| Leakage Current | 55uA(typical) at 50Hz, AC100V input measured by Yokogawa \#3226 1KOhm/0.1uF |  |  |  |  |  |  |
| Line Conducted Noise | Built to meet FCC Part15-B Class B |  |  |  |  |  |  |
|  | Built to meet VCCI Class B |  |  |  |  |  |  |
| Weight (typical) | 85 g (board type switcher) |  |  |  |  |  |  |
| MTBF [H] | 730,000 |  |  |  |  |  |  |
| Switching Frequency[kHz](typical) | 75 at rated input/output |  |  |  |  |  |  |

