## DIGITRON SEMICONDUCTORS

1N5624-1N5627
GLASS PASSI VATED RECTI FIER
MAXI MUM RATI NGS and ELECTRICAL CHARACTERISTICS ( $\mathrm{T}_{\mathrm{A}}=25^{\circ} \mathrm{C}$ unless otherw ise noted)

| Characteristics | Symbol | 1N5624 | 1N5625 | 1N5626 | 1N5627 | Unit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Maximum peak repetitive reverse voltage | $\mathrm{V}_{\text {RRM }}$ | 200 | 400 | 600 | 800 | V |
| Maximum RMS voltage | $V_{\text {RMS }}$ | 140 | 280 | 420 | 560 | V |
| Maximum DC blocking voltage | $\mathrm{V}_{\mathrm{DC}}$ | 200 | 400 | 600 | 800 | V |
| Maximum average forward rectified current $0.375^{\prime \prime}$ lead length @ $T_{A}=70^{\circ} \mathrm{C}$ | $\mathrm{I}_{\mathrm{AV}}$ | 3.0 |  |  |  | A |
| Peak forward surge current <br> 8.3 ms single half sine wave superimposed on rated load | $\mathrm{I}_{\text {fSM }}$ | 125 |  |  |  | A |
| Maximum instantaneous forward voltage @ 3.0A $\begin{aligned} & \mathrm{T}_{\mathrm{A}}=25^{\circ} \mathrm{C} \\ & \mathrm{~T}_{\mathrm{A}}=70^{\circ} \mathrm{C} \\ & \hline \end{aligned}$ | $V_{F}$ | $\begin{gathered} 1.0 \\ 0.95 \end{gathered}$ |  |  |  | V |
| Maximum DC reverse current at rated DC blocking voltage $\mathrm{T}_{\mathrm{A}}=25^{\circ} \mathrm{C}$ | $I_{\text {R }}$ | 5.0 |  |  |  | $\mu \mathrm{A}$ |
| $\mathrm{T}_{\mathrm{A}}=175^{\circ} \mathrm{C}$ |  | 300 |  | 200 |  |  |
| Maximum full load reverse current <br> Full cycle average, $0.375^{\prime \prime}$ lead length $@ T_{A}=70^{\circ} \mathrm{C}$ | $\mathrm{I}_{\mathrm{R} \text { (AV) }}$ | 150 |  | 100 |  | $\mu \mathrm{A}$ |
| Typical junction capacitance ${ }^{(1)}$ | $\mathrm{C}_{J}$ | 40 |  |  |  | pF |
| Typical thermal resistance ${ }^{(2)}$ | $\begin{aligned} & \mathrm{R}_{\text {өf }} \\ & \mathrm{R}_{\text {ө } \mathrm{L}} \end{aligned}$ | 20 |  |  |  | ${ }^{\circ} \mathrm{C} / \mathrm{W}$ |
| Operating junction temperature range | T | -65 to +175 |  |  |  | ${ }^{\circ} \mathrm{C}$ |
| Storage temperature range | $\mathrm{T}_{\text {STG }}$ | -65 to +200 |  |  |  | ${ }^{\circ} \mathrm{C}$ |

Note 1: Measured at 1.0 MHz and applied reverse voltage of 4.0 V .
Note 2: Thermal resistance from junction to ambient and from junction to lead at 0.375 " lead length, with both leads attached between heatsinks.

## MECHANI CAL CHARACTERISTICS

| Case | Digi K |
| :--- | :--- |
| Marking | Body painted, alpha-numeric |
| Polarity | Cathode band |



|  | Digi K |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Inches |  | Millimeters |  |
|  | Min | Max | Min | Max |
|  | 0.170 | 0.250 | 4.318 | 6.350 |
| BL | - | 0.300 | - | 7.620 |
| LD | 0.048 | 0.052 | 1.219 | 1.321 |
| LL | 1.000 | - | 25.400 | - |




FIG. 5 - TYPICAL JUNCTION CAPACITANCE


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



Available Non-RoHS (standard) or RoHS compliant (add PBF suffix).
Available as "HR" (high reliability) screened per MIL-PRF-19500, JANTX level. Add "HR" suffix to base part number.

