



GLASS PACKAGE STEP RECOVERY DIODE

DESCRIPTION:

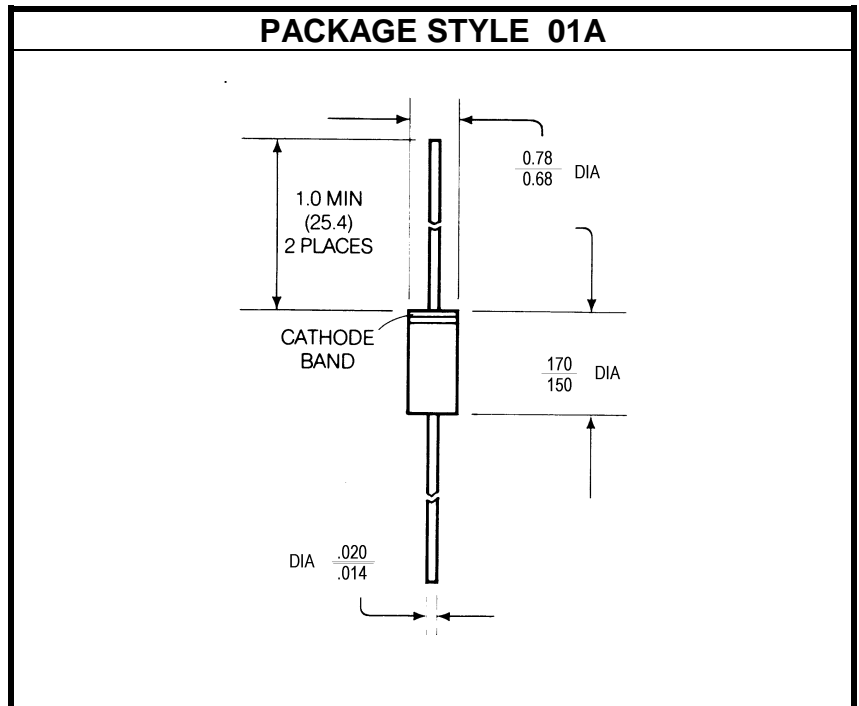
The **ASRD 700** Series of Step Recovery Diodes are Designed for General Purpose VCO and Sampler Applications.

FEATURES INCLUDE:

- Transition Time as Low as **70 pS**
- Hermetic Glass Package

MAXIMUM RATINGS

| | |
|-------------------------|-----------------------------|
| I_F | 50 mA |
| V_R | UP TO RATED V _{BR} |
| P_{DISS} | 290 mW |
| T_J | -65 °C to +200 °C |
| T_{STG} | -65 °C to +200 °C |
| θ_{JC} | 0.6 °C /mW |



STATIC ELECTRICAL CHARACTERISTICS T_c = 25 °C

| SYMBOL | TEST CONDITIONS | | MINIMUM | TYPICAL | MAXIMUM | UNITS |
|-----------------------|------------------------|-----------|----------|---------|---------|-----------|
| V_{BR} | I _R = 10 μA | ASRD 703 | 70 | | | V |
| | | ASRD 715 | 50 | | | |
| | | ASRD 725 | 45 | | | |
| | | ASRD 733 | 25 | | | |
| | | ASRD 740 | 15 | | | |
| | | ASRD 751 | 15 | | | |
| | | ASRD 753 | 25 | | | |
| C_{J6} | V _R = 6 V | f = 1 MHz | ASRD 703 | | 6.0 | pF |
| | | | ASRD 715 | | 4.0 | |
| | | | ASRD 725 | | 2.0 | |
| | | | ASRD 733 | | 1.6 | |
| | | | ASRD 740 | | 0.6 | |
| | | | ASRD 751 | | 0.65 | |
| | | | ASRD 753 | | 0.4 | |



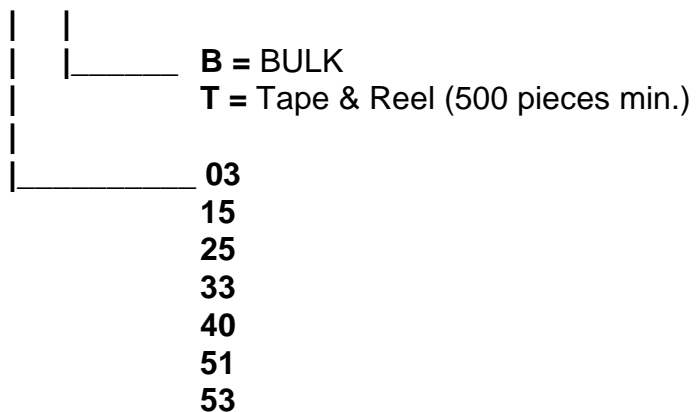
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DYNAMIC ELECTRICAL CHARACTERISTICS $T_C = 25\text{ }^\circ\text{C}$

| SYMBOL | TEST CONDITIONS | | | MINIMUM | TYPICAL | MAXIMUM | UNITS |
|----------|----------------------|---------------------|----------|--------------------|---------------------|----------|-------|
| τ | $I_F = 10\text{ mA}$ | $I_R = 6\text{ mA}$ | ASRD 703 | 200 | | | nS |
| | | | ASRD 715 | 100 | | | |
| | | | ASRD 725 | 30 | | | |
| | | | ASRD 733 | 10 | | | |
| | | | ASRD 740 | 10 | | | |
| | | | ASRD 751 | 10 | | | |
| | | | ASRD 753 | 10 | | | |
| | | | T_t | $V_R = 7\text{ V}$ | $I_F = 3\text{ mA}$ | ASRD 703 | |
| ASRD 715 | | 320 | | | | | |
| ASRD 725 | | 160 | | | | | |
| ASRD 733 | | 90 | | | | | |
| ASRD 740 | | 75 | | | | | |
| ASRD 751 | | 100 | | | | | |
| ASRD 753 | | 95 | | | | | |

ORDERING INFORMATION:

ASRD 7XXB





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CROSS REFERENCE

| HP P/N | ASI P/N |
|---------------|----------------|
| 5082-0151 | ASRD 751 |
| 5082-0153 | ASRD 753 |
| 5082-0803 | ASRD 703 |
| 5082-0815 | ASRD 715 |
| 5082-0825 | ASRD 725 |
| 5082-0833 | ASRD 733 |
| 5082-0840 | ASRD 740 |