

## STEP RECOVERY DIODES (SRD'S)

| TYPE (1)<br>NUMBER | BREAKDOWN<br>VOLTAGE<br>$V_B$ (MIN) (2)<br>@ 10 $\mu$ A Volts | JUNCTION (3)<br>CAPACITANCE<br>$C_J$ -6<br>PF | MINORITY (4)<br>CARRIER LIFETIME<br>$T_I$ (MIN)<br>ns | TRANSITION (5)<br>TIME<br>- $T_t$ (MAX)<br>ps |
|--------------------|---------------------------------------------------------------|-----------------------------------------------|-------------------------------------------------------|-----------------------------------------------|
| AS11A              | 10                                                            | 0.26-0.42                                     | 5                                                     | 100                                           |
| AS11B              | 10                                                            | 0.42-0.58                                     | 5                                                     | 100                                           |
| AS11C              | 10                                                            | 0.58-1.60                                     | 5                                                     | 100                                           |
| AS11D              | 10                                                            | 1.60-3.00                                     | 5                                                     | 100                                           |
| AS12A              | 10                                                            | 0.26-0.42                                     | 5                                                     | 200                                           |
| AS12B              | 10                                                            | 0.42-0.58                                     | 5                                                     | 200                                           |
| AS12C              | 10                                                            | 0.58-1.60                                     | 5                                                     | 200                                           |
| AS12D              | 10                                                            | 1.60-3.00                                     | 5                                                     | 200                                           |
| AS21A              | 20                                                            | 0.26-0.42                                     | 7                                                     | 100                                           |
| AS21B              | 20                                                            | 0.42-0.58                                     | 7                                                     | 100                                           |
| AS21C              | 20                                                            | 0.58-1.60                                     | 7                                                     | 100                                           |
| AS21D              | 20                                                            | 1.60-3.00                                     | 7                                                     | 100                                           |
| AS22A              | 20                                                            | 0.26-0.42                                     | 7                                                     | 200                                           |
| AS22B              | 20                                                            | 0.42-0.58                                     | 7                                                     | 200                                           |
| AS22C              | 20                                                            | 0.58-1.60                                     | 7                                                     | 200                                           |
| AS22D              | 20                                                            | 1.60-3.00                                     | 7                                                     | 200                                           |
| AS31A              | 30                                                            | 0.26-0.42                                     | 8                                                     | 100                                           |
| AS31B              | 30                                                            | 0.42-0.58                                     | 8                                                     | 100                                           |
| AS31C              | 30                                                            | 0.58-1.60                                     | 8                                                     | 100                                           |
| AS31D              | 30                                                            | 1.60-3.00                                     | 8                                                     | 100                                           |
| AS32A              | 30                                                            | 0.26-0.42                                     | 8                                                     | 200                                           |
| AS32B              | 30                                                            | 0.42-0.58                                     | 8                                                     | 200                                           |
| AS32C              | 30                                                            | 0.58-1.60                                     | 8                                                     | 200                                           |
| AS32D              | 30                                                            | 1.60-3.00                                     | 8                                                     | 200                                           |
| AS41A              | 40                                                            | 0.26-0.42                                     | 12                                                    | 120                                           |
| AS41B              | 40                                                            | 0.42-0.58                                     | 12                                                    | 120                                           |
| AS41C              | 40                                                            | 0.58-1.60                                     | 12                                                    | 120                                           |
| AS41D              | 40                                                            | 1.60-3.00                                     | 12                                                    | 120                                           |
| AS42A              | 40                                                            | 0.26-0.42                                     | 12                                                    | 200                                           |
| AS42B              | 40                                                            | 0.42-0.58                                     | 12                                                    | 200                                           |
| AS42C              | 40                                                            | 0.58-1.60                                     | 12                                                    | 200                                           |
| AS42D              | 40                                                            | 1.60-3.00                                     | 12                                                    | 200                                           |
| AS43A              | 40                                                            | 0.26-0.42                                     | 12                                                    | 300                                           |
| AS43B              | 40                                                            | 0.42-0.58                                     | 12                                                    | 300                                           |
| AS43C              | 40                                                            | 0.58-1.60                                     | 12                                                    | 300                                           |
| AS43D              | 40                                                            | 1.60-3.00                                     | 12                                                    | 300                                           |
| AS52A              | 50                                                            | 0.26-0.42                                     | 15                                                    | 200                                           |
| AS52B              | 50                                                            | 0.42-0.58                                     | 15                                                    | 200                                           |
| AS52C              | 50                                                            | 0.58-1.60                                     | 15                                                    | 200                                           |
| AS52D              | 50                                                            | 1.60-3.00                                     | 15                                                    | 200                                           |
| AS53A              | 50                                                            | 0.26-0.42                                     | 15                                                    | 300                                           |
| AS53B              | 50                                                            | 0.42-0.58                                     | 15                                                    | 300                                           |
| AS53C              | 50                                                            | 0.58-1.60                                     | 15                                                    | 300                                           |
| AS53D              | 50                                                            | 1.60-3.00                                     | 15                                                    | 300                                           |
| AS63A              | 60                                                            | 0.26-0.42                                     | 20                                                    | 300                                           |
| AS63B              | 60                                                            | 0.42-0.58                                     | 20                                                    | 300                                           |
| AS63C              | 60                                                            | 0.58-1.60                                     | 20                                                    | 300                                           |
| AS63D              | 60                                                            | 1.60-3.00                                     | 20                                                    | 300                                           |

### NOTES:

1. When ordering add package style suffix to denote desired package style. Package style 10, 42, 51 and 52 are available for this series

2. Breakdown Voltage measured at  $I_R=10\mu A$ .

3. Junction Capacitance measured at -6 volts and 1 MHz.

4. Minority Carrier Lifetime measured at  $1_R=6mA$  and  $I_F=1.7I_R$ .

5. Transition Time is measured between the 20% and 80% points in the voltage recovery waveform. Test condition +10mA and -10 Volts.