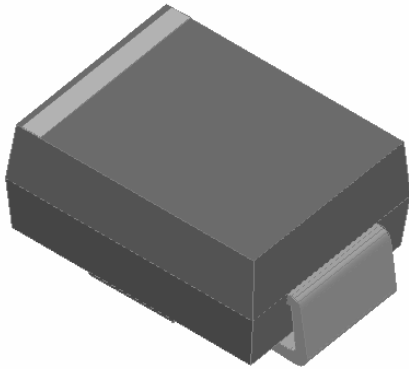


## Surface Mount Super Fast Recovery Rectifier

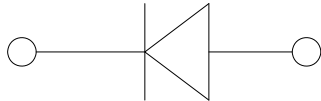


### Features

- Low profile package
- Ideal for automated placement
- Glass passivated chip junction
- High forward surge capability
- Super Fast reverse recovery time
- Meets MSL level 1, per J-STD-020, LF maximum peak of 260 °C

### Typical Applications

For use in high frequency rectification of power supplies, inverters, converters, and freewheeling diodes for consumer, and telecommunication.



### Mechanical Data

- **Package:** DO-214AA (SMB)  
Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant, halogen-free
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Cathode line denotes the cathode end

### ■Maximum Ratings (Ta=25 Unless otherwise specified)

| PARAMETER                                                                           | SYMBOL | UNIT | ES3AB             | ES3BB | ES3CB | ES3DB | ES3FB | ES3GB | ES3HB | ES3JB | ES3KB |
|-------------------------------------------------------------------------------------|--------|------|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Device marking code                                                                 |        |      | ES3AB             | ES3BB | ES3CB | ES3DB | ES3FB | ES3GB | ES3HB | ES3JB | ES3KB |
| Maximum Repetitive Peak Reverse Voltage                                             | VRRM   | V    | 50                | 100   | 150   | 200   | 300   | 400   | 500   | 600   | 800   |
| Maximum RMS Voltage                                                                 | VRMS   | V    | 35                | 70    | 105   | 140   | 210   | 280   | 350   | 420   | 560   |
| Maximum DC blocking Voltage                                                         | VDC    | V    | 50                | 100   | 150   | 200   | 300   | 400   | 500   | 600   | 800   |
| Average rectified output current<br>@60Hz sine wave, resistance load,<br>TL (Fig.1) | IO     | A    | 3.0               |       |       |       |       |       |       |       |       |
| Forward Surge Current (Non-repetitive)<br>@60Hz Half-sine wave, 1 cycle, Tj=25      | IFSM   | A    | 100               |       |       |       |       |       |       |       |       |
| Forward Surge Current (Non-repetitive)<br>@1ms, square wave, 1 cycle, Tj=25         |        |      | 200               |       |       |       |       |       |       |       |       |
| Current squared time<br>@1ms≤t≤8.3ms Tj=25                                          |        |      | 2 t w ≠ 2 4 1 . 5 |       |       |       |       |       |       |       |       |
| Storage temperature                                                                 | Tstg   |      | -55 ~ +150        |       |       |       |       |       |       |       |       |
| Junction temperature                                                                | Tj     |      | -55 ~ +150        |       |       |       |       |       |       |       |       |



### ■Electrical Characteristics    $T_a$



## ES3AB THRU ES3KB

FIG3 Typical Forward Voltage

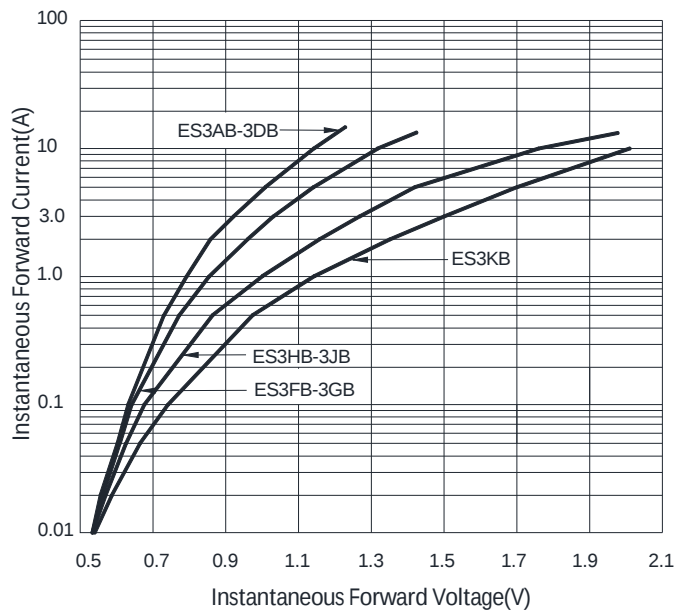
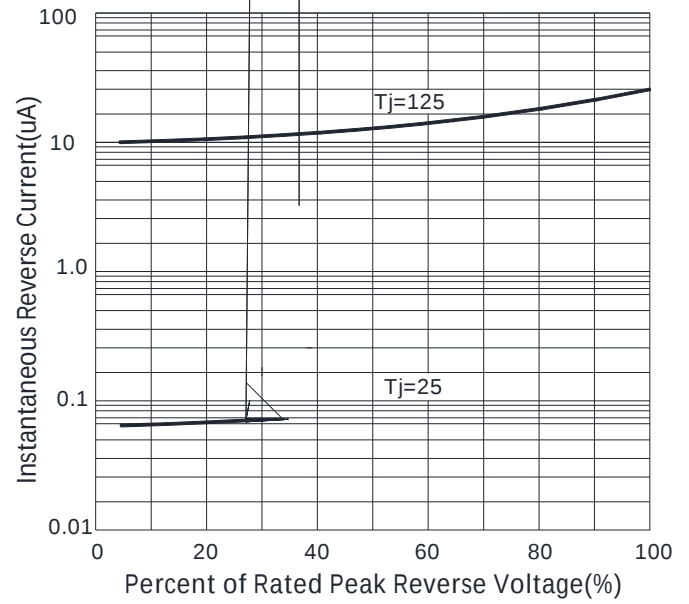


FIG4: Typical Reverse Characteristics



### ■ Ordering Information (Example)

| PREFERED P/N | PACKING CODE | UNIT WEIGHT(g)    | MINIMUM PACKAGE(pcs) | INNER BOX QUANTITY(pcs) | OUTER CARTON QUANTITY(pcs) | DELIVERY MODE |
|--------------|--------------|-------------------|----------------------|-------------------------|----------------------------|---------------|
| ES3AB-ES3KB  | F1           | Approximate 0.096 | 3000                 | /                       | 48000                      | 13" reel      |
| ES3AB-ES3KB  | F2           | Approximate 0.096 | 750                  | 6000                    | 24000                      | 7" reel       |
| ES3AB-ES3KB  | F3           | Approximate 0.096 | 500                  | 4000                    | 16000                      | 7" reel       |



### ■ Outline Dimensions

DO-214AA(SMB) S

### ■ Suggested pad layout



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