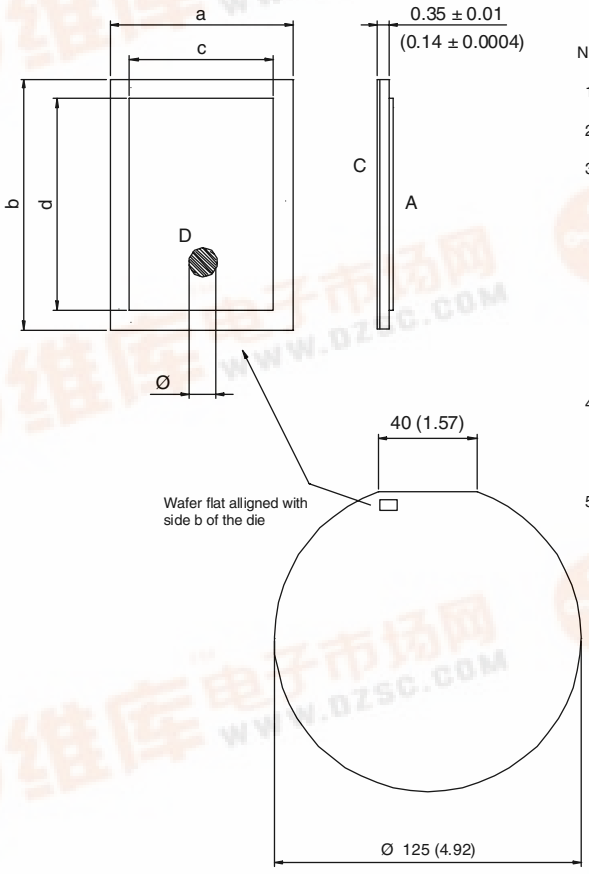
International
IOR Rectifier

Bulletin I0503J 12/99

# SC105.....5. Series

## SCHOTTKY DIE 105 x 125 mils




NOTES:

1. ALL DIMENSIONS ARE SHOWN IN MILLIMETERS (INCHES).
2. CONTROLLING DIMENSION: (INCH).
3. DIMENSIONS AND TOLERANCES:
   **a = 3.18 + 0, - 0.05**
   **(0.125 + 0, - 0.002)**
   **b = 2.67 + 0, - 0.05**
   **(0.105 + 0, - 0.002)**
   **c = 3.02 + 0, - 0.003**
   **(0.119 + 0, - 0.0001)**
   **d = 2.51 + 0, - 0.003**
   **(0.099 + 0, - 0.0001)**
   **Ø = 0.7 ± 0.1**
   **(0.03 ± 0.004)**
4. LETTER DESIGNATION:
   A = Anode (Top Metal)
   C = Cathode (Back Metal)
   D = Reject Ink Dot (only on non-conforming dies)
5. SAWING:
   Recommended Blade
   SEMITEC S1025 QS00 Blade

NOT TO SCALE

**NOTE: 10 mils die thickness is available on specific request only.**
**Contact factory for information.**

## Electrical Characteristics

| Device # | $T_J$ Max. (°C) | $V_R$ (V) | Typ. $I_R$ @ 25°C (µA) | Typ. $I_R$ @ 125°C (mA) | Max. $V_F$ @ $I_F$ (V) | Package Style |
|---|---|---|---|---|---|---|
| SC105**R**015x5x | 125 | 15 | 3000 | n.a. contact factory | | |
| SC105**S**020x5x | 125 | 20 | n.a. contact factory | | | |
| SC105**S**030x5x | 150 | 30 | 220 | 100 | 0.49 @ 15A | TO-220 |
| SC105**S**045x5x | 150 | 45 | 150 | 75 | 0.54 @ 15A | TO-247 |
| SC105**S**060x5x | 150 | 60 | 110 | 60 | 0.60 @ 15A | TO-247 |
| SC105**H**045x5x | 175 | 45 | 35 | 10 | 0.62 @ 15A | TO-220 |
| SC105**H**100x5x | 175 | 100 | 12 | 7 | 0.86 @ 15A | TO-247 |
| SC105**H**150x5x | 175 | 150 | 15 | 7 | 1.00 @ 15A | TO-220 |

## Mechanical Data

| Device # | | Metal Thickness Front Metal | | | Metal Thickness Back Metal | | |
|---|---|---|---|---|---|---|---|
| SC105xxxx**A**5x | Bondable | – | Al/Si 30 kÅ | – | Cr 1 kÅ | Ni 4 kÅ | Ag 6 kÅ |
| SC105xxxx**S**5x | Solderable | Ti 2 kÅ | Ni 6 kÅ | Ag 35 kÅ | Cr 1 kÅ | Ni 4 kÅ | Ag 6 kÅ |

Recommended Storage Environment: Store in original container, in dessicated nitrogen, with no contamination.

Shelf life for parts stored in above condition is 2 years.

If the storage is done in normal atmosphere shelf life is reduced to six months.

## Packaging

| Device # | Description | Minimum Order Quantity Wafer in Sale Package |
|---|---|---|
| SC105xxxxx5**B** | Inked Probed Unsawn Wafer (Wafer in Box) | 1150 |
| SC105xxxxx5**R** | Probed Die in Tape & Reel | 3000 |
| SC105xxxxx5**P** | Probed Die in Waffle Pack | 1150 |
| SC105xxxxx5**F** | Inked Probed Sawn Wafer on Film | 1150 |

## Ordering Information Table

**Device Code**

| SC | 105 | H | 100 | S | 5 | B |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

**1** - Schottky Die

**2** - Chip Dimension in Mils

**3** - Process (see Electrical Characteristics Table)

H = 830 Process
R = OR'ing Process
S = Standard Process

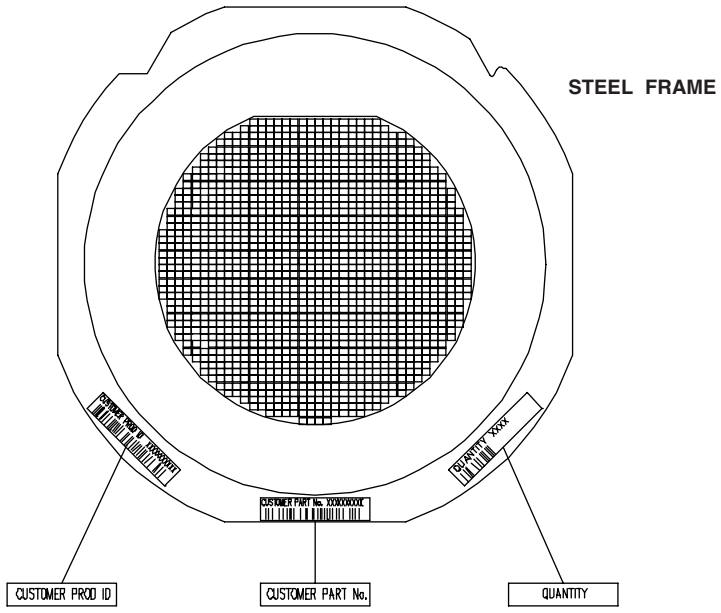
**4** - Voltage code: Code = $V_{RRM}$

**5** - Chip surface metallization (see Mechanical Data Table)

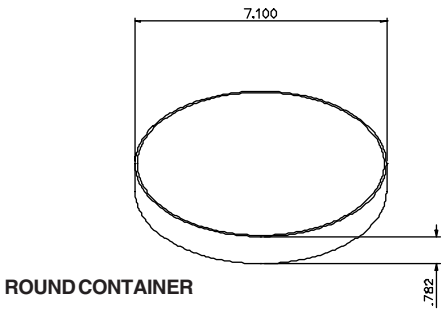
**6** - Wafer Diameter in inches

**7** - Packaging (see Packaging Table)

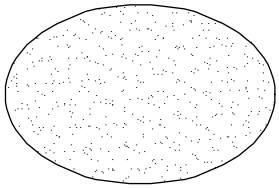
## Wafer on Film



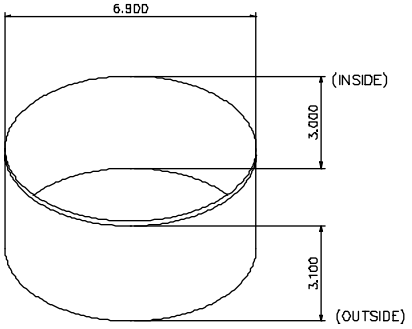
## Wafer in Box

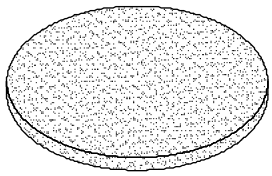



ROUND CONTAINER



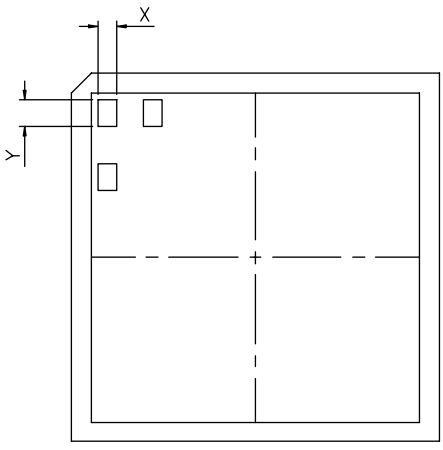
TYVEK DISK

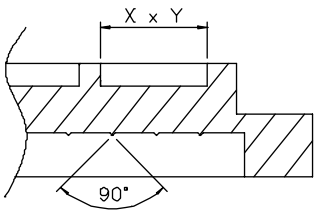


FOAM DISK

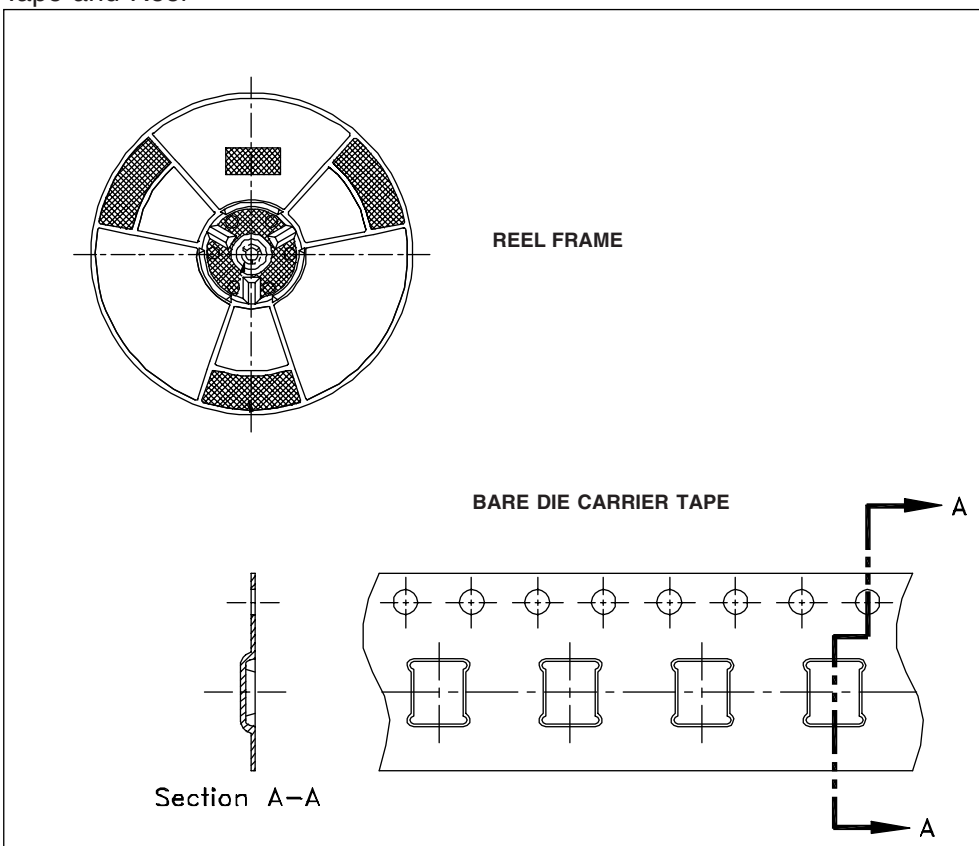
## Die in Waffle Pack




CHIP TRAY POCKET

## Tape and Reel

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