

AMC03FA40

Fast Recovery Diodes

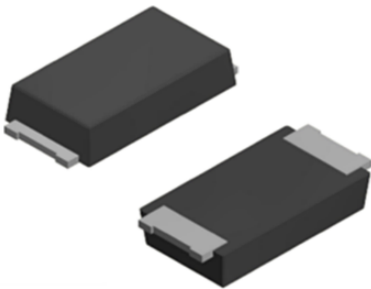
400V, 3A

Feature

- Low  $I_R$
- Fast Recovery Time
- Soft Recovery
- RoHS:Yes
- Based on AEC-Q101

OUTLINE

Package (House Name): nSMC\_FL



Equivalent circuit



Absolute Maximum Ratings

| Item                            | Symbol    | Conditions                                   | Ratings    | Unit |
|---------------------------------|-----------|----------------------------------------------|------------|------|
| Storage temperature             | Tstg      |                                              | -55 to 150 | °C   |
| Junction temperature            | Tj        |                                              | -55 to 150 | °C   |
| Repetitive peak reverse voltage | $V_{RRM}$ |                                              | 400        | V    |
| Average forward current         | $I_F(AV)$ | Tl=92°C                                      | 3          | A    |
| Surge forward current           | $I_{FSM}$ | 50Hz half sine wave, 1 cycle, Non-repetitive | 45         | A    |

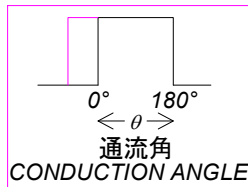
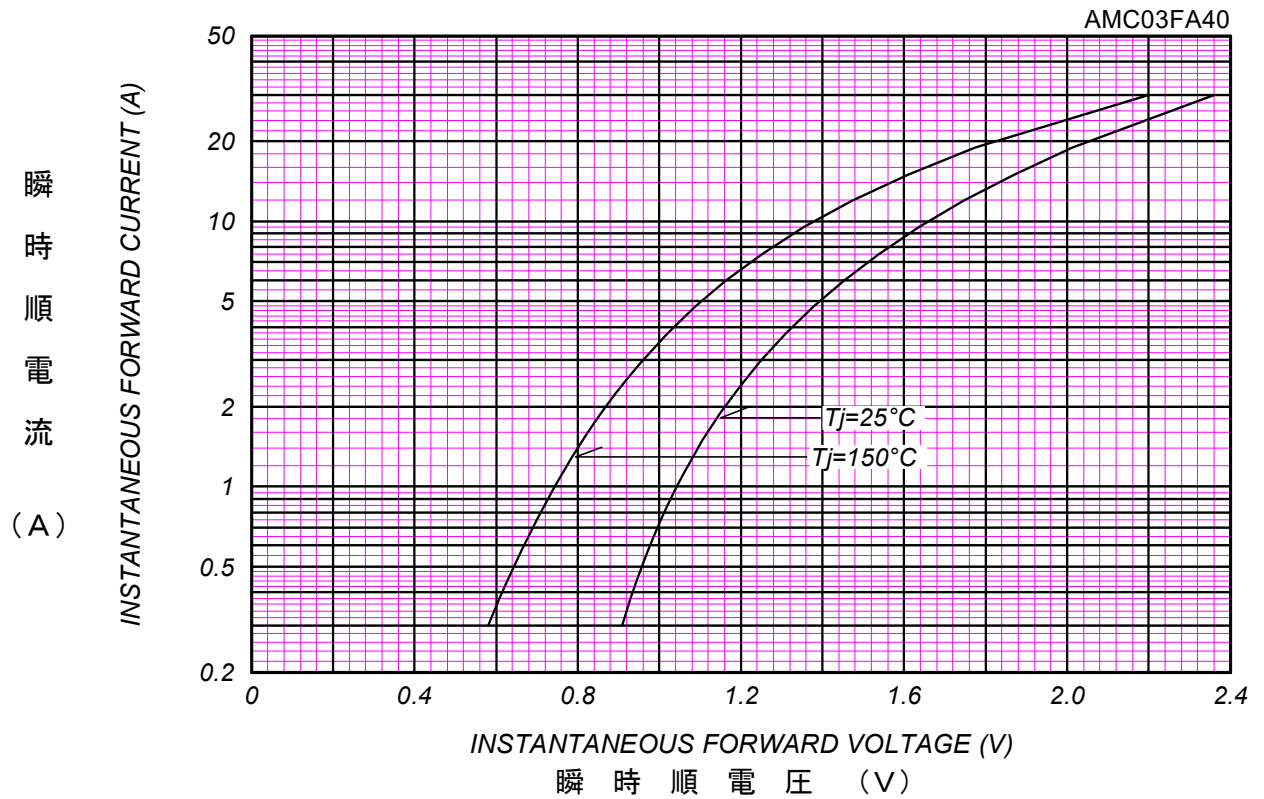
※ :See the original Specifications

Electrical Characteristics

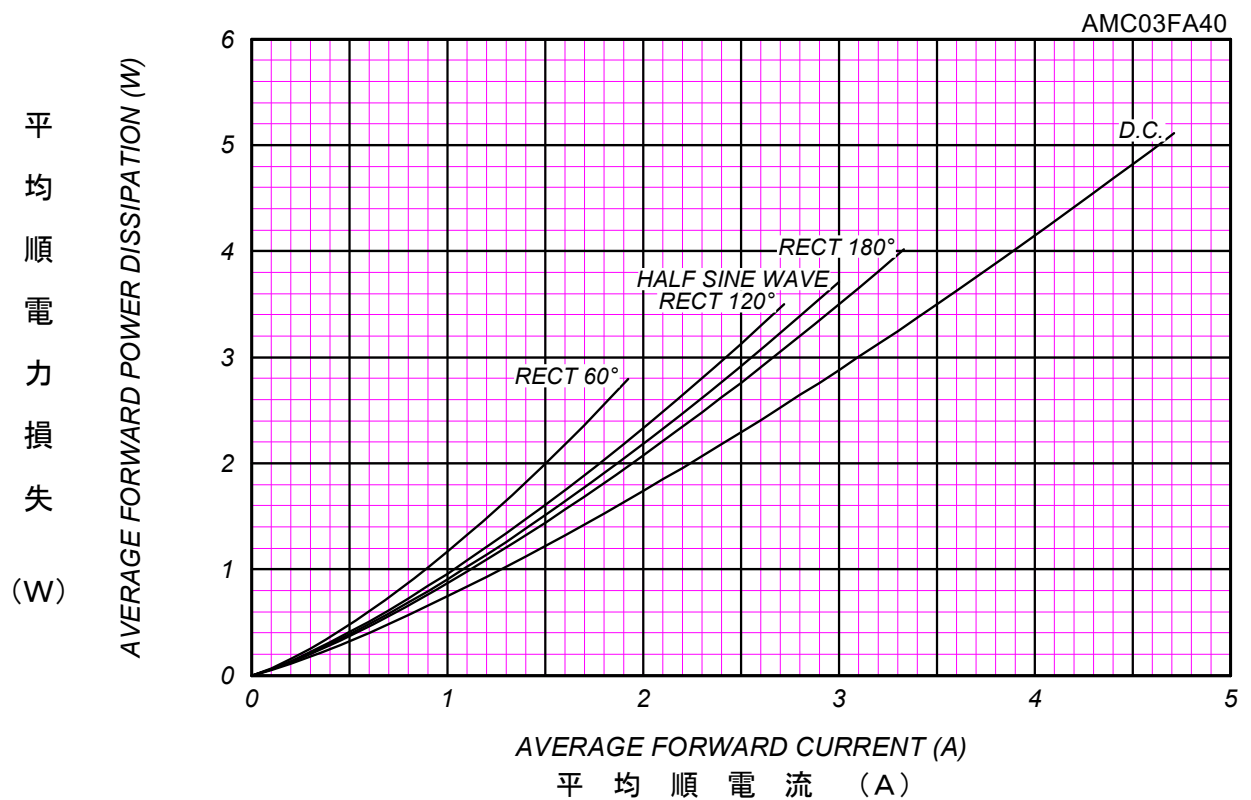
| Item               | Symbol   | Conditions                              | Ratings |     |      | Unit |
|--------------------|----------|-----------------------------------------|---------|-----|------|------|
|                    |          |                                         | MIN     | TYP | MAX  |      |
| Forward voltage    | $V_F$    | IF=3A, Tj=25°C                          | -       | -   | 1.25 | V    |
| Reverse current    | $I_R$    | VR=VRRM, Tj=25°C                        | -       | -   | 10   | μA   |
| Thermal resistance | Rth(j-l) | Junction to lead                        | -       | -   | 8    | °C/W |
| Thermal resistance | Rth(j-a) | Junction to ambient (P.C.Board mounted) | -       | -   | 70   | °C/W |

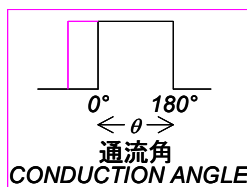
※ :See the original Specifications

順電圧特性  
FORWARD CURRENT VS. VOLTAGE

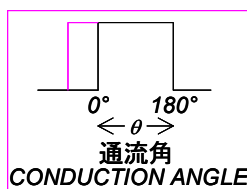
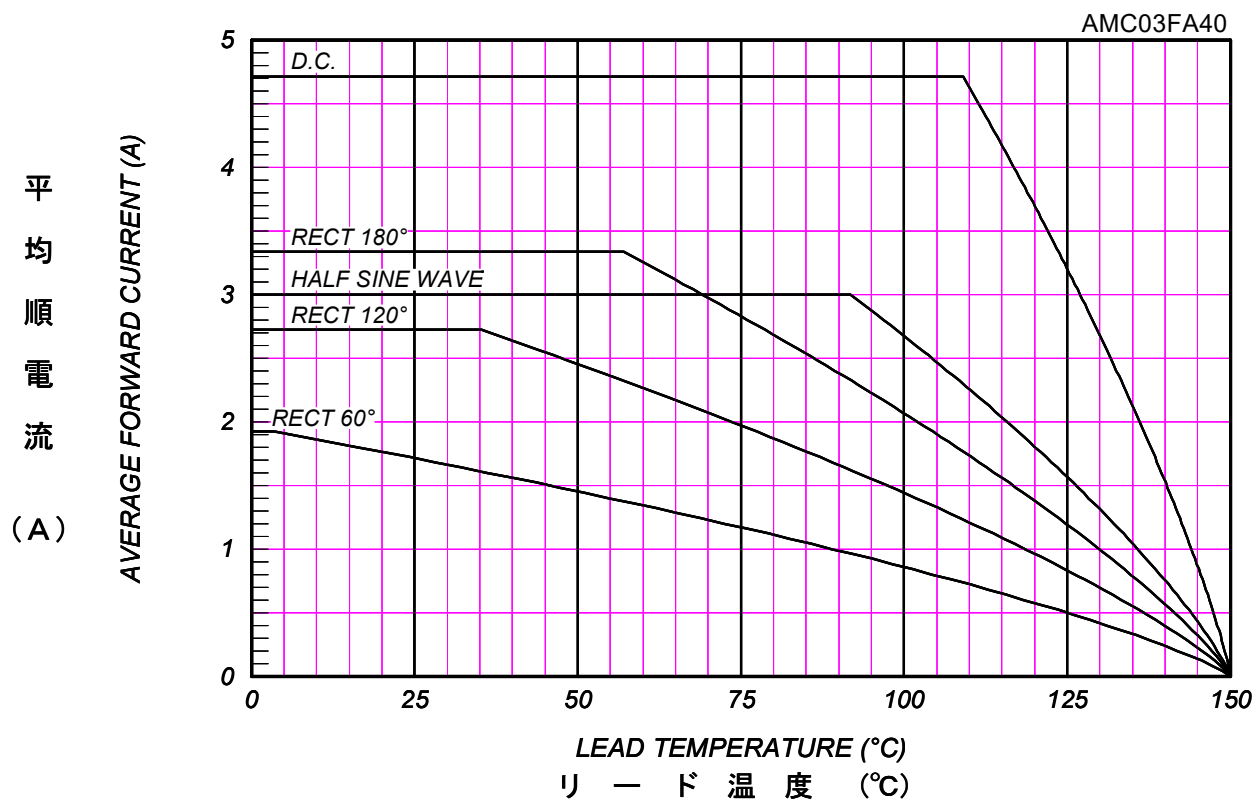


平均順電力損失特性  
AVERAGE FORWARD POWER DISSIPATION



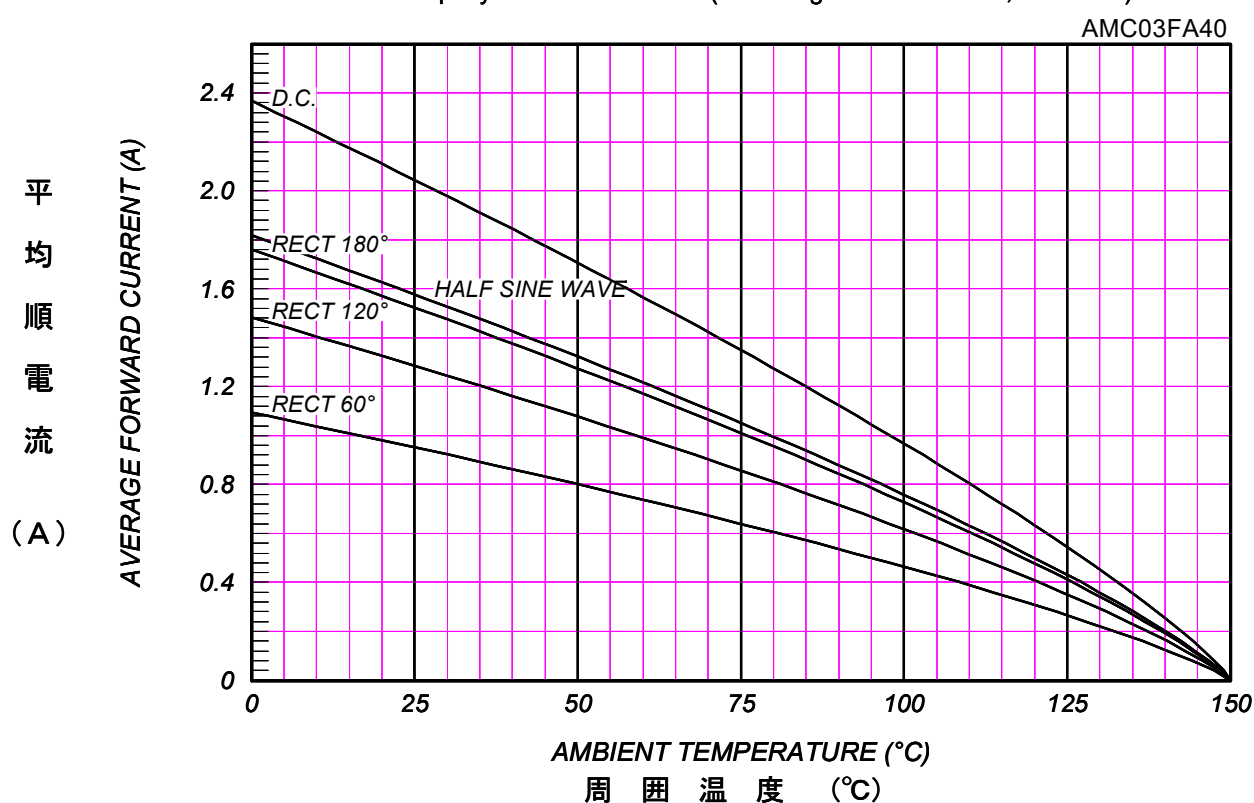


平均順電流－リード温度定格  
AVERAGE FORWARD CURRENT VS. LEAD TEMPERATURE



平均順電流－周囲温度定格  
AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

Glass-Epoxy Substrate Mounted (Soldering Land=2×3.5mm, Both side)



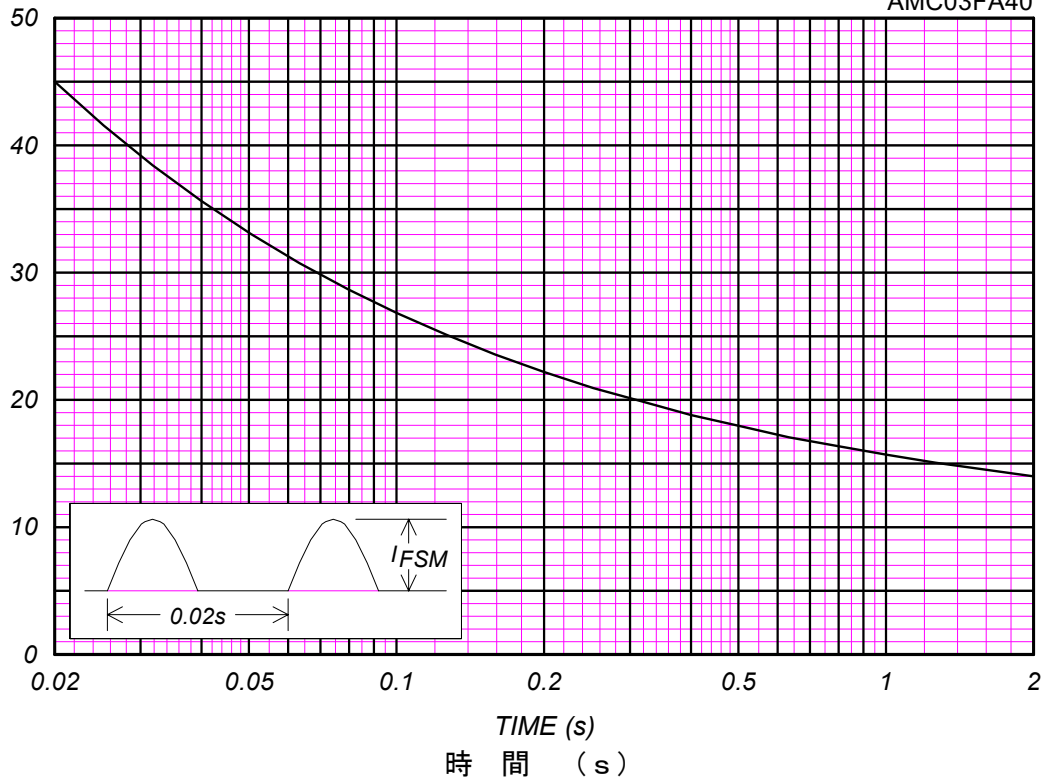
サージ順電流定格  
SURGE CURRENT RATINGS

f=50Hz, Half Sine Wave, Non-Repetitive, No Load

AMC03FA40

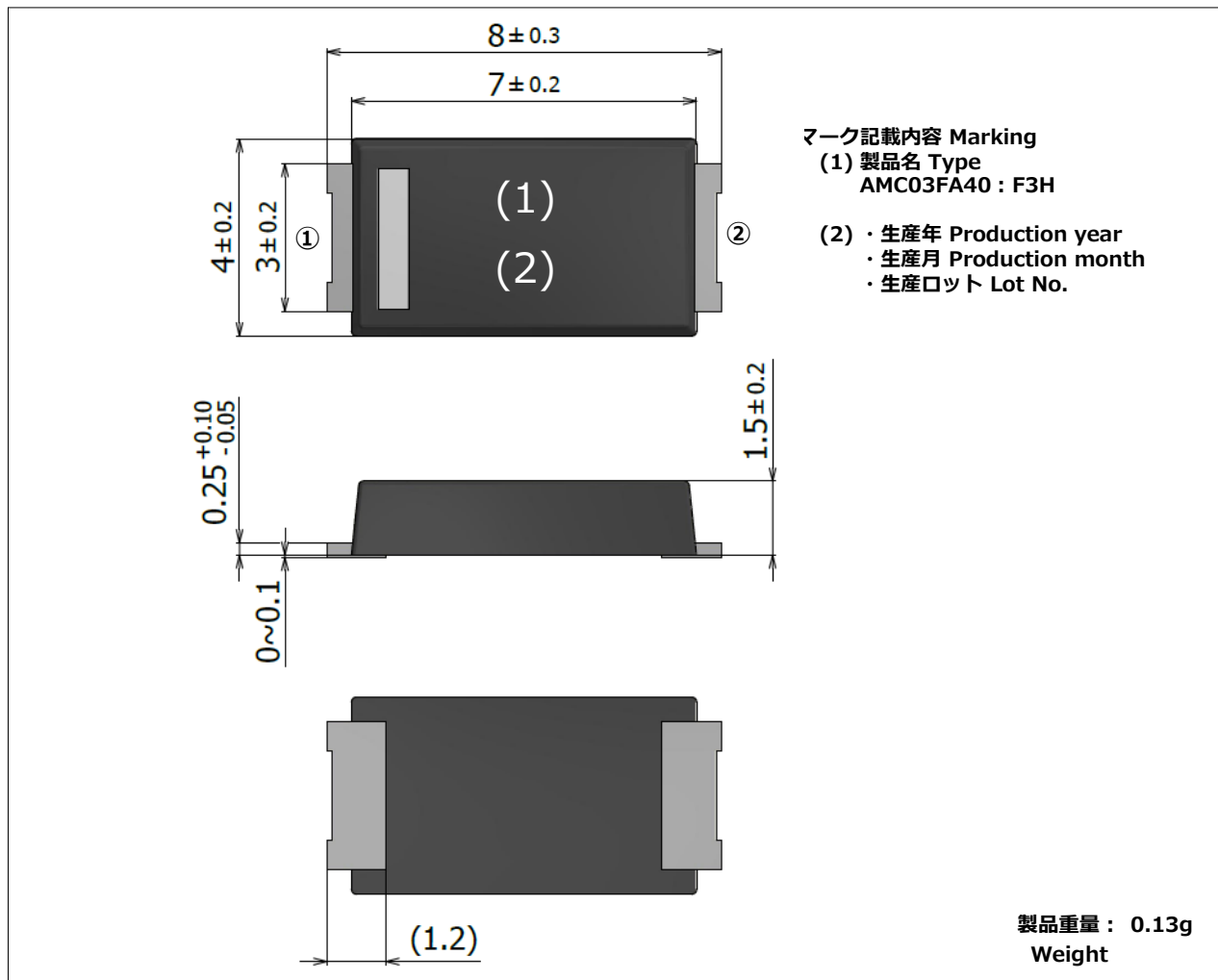
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SURGE FORWARD CURRENT (A)

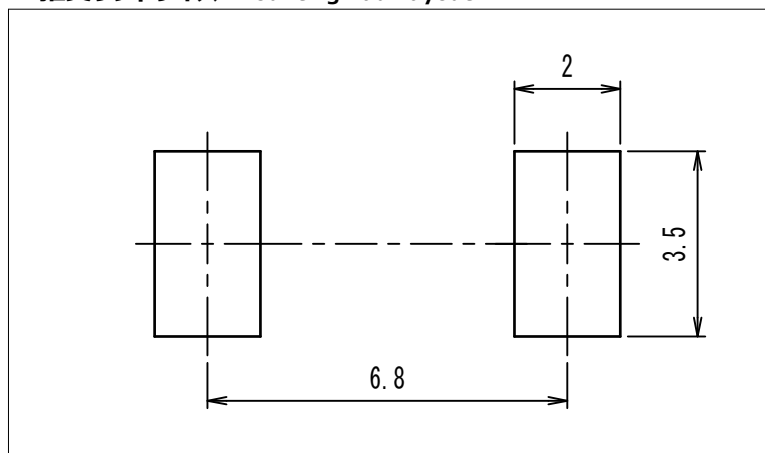


## nSMC\_FL

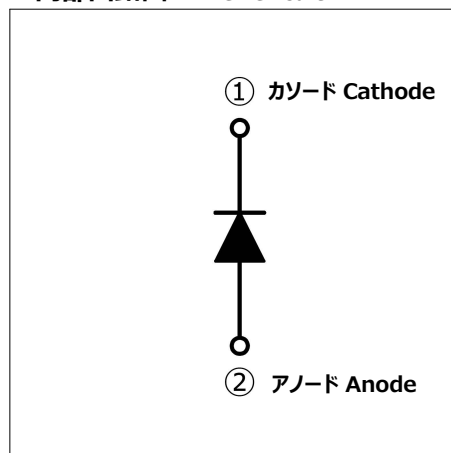
### ■ 外形図 Package Outline



### ■ 推奨ランドサイズ Mounting Pad Layout



### ■ 内部回路図 Inner Circuit



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