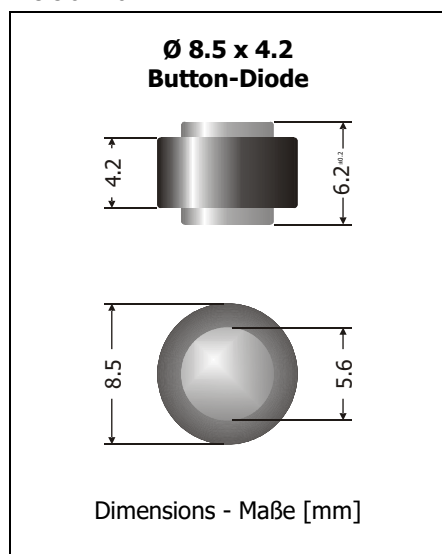


**RA251 ... RA2510**  
**Standard Recovery Rectifier Diodes**  
**Gleichrichterdioden mit Standard-Sperrverzug**

$I_{FAV} = 25 \text{ A}$   
 $V_F < 1.1 \text{ V}$   
 $T_{jmax} = 175^\circ\text{C}$

$V_{RRM} = 100...1000 \text{ V}$   
 $I_{FSM} = 375/400 \text{ A}$   
 $t_{rr} \sim 1500 \text{ ns}$

Version 2017-12-22

**Typical Applications**

On-board alternators  
Polarity protection  
Commercial grade <sup>1)</sup>

**Features**

High surge current rating  
 $V_{RRM}$  up to 1000 V  
Compliant to RoHS, REACH,  
Conflict Minerals <sup>1)</sup>

**Mechanical Data <sup>1)</sup>**

Packed in cardboard trays 1000  
Weight approx. 1.9 g  
Case material UL 94V-0  
Solder & assembly conditions 260°C/10s  
MSL N/A

**Typische Anwendungen**

Bordnetz-Generatoren  
Verpolschutz  
Standardausführung <sup>1)</sup>

**Besonderheiten**

Hohe Stoßstromfestigkeit  
 $V_{RRM}$  bis zu 1000 V  
Konform zu RoHS, REACH,  
Konfliktmineralien <sup>1)</sup>

**Mechanische Daten <sup>1)</sup>**

Verpackt in Einlegekartons  
Gewicht ca.  
Gehäusematerial  
Löt- und Einbaubedingungen

Marking: Colored ring denotes "cathode"  
Kennzeichnung: Farbiger Ring kennzeichnet "Kathode"

**Maximum ratings <sup>2)</sup>****Grenzwerte <sup>2)</sup>**

|        | Repetitive peak reverse voltage<br>Periodische Spitzensperrspannung<br>$V_{RRM} \text{ [V]}$ | Surge peak reverse voltage<br>Stoßspitzensperrspannung<br>$V_{RSM} \text{ [V]}$ |
|--------|----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|
| RA351  | 100                                                                                          | 100                                                                             |
| RA352  | 200                                                                                          | 200                                                                             |
| RA354  | 400                                                                                          | 400                                                                             |
| RA356  | 600                                                                                          | 600                                                                             |
| RA358  | 800                                                                                          | 800                                                                             |
| RA3510 | 1000                                                                                         | 1000                                                                            |

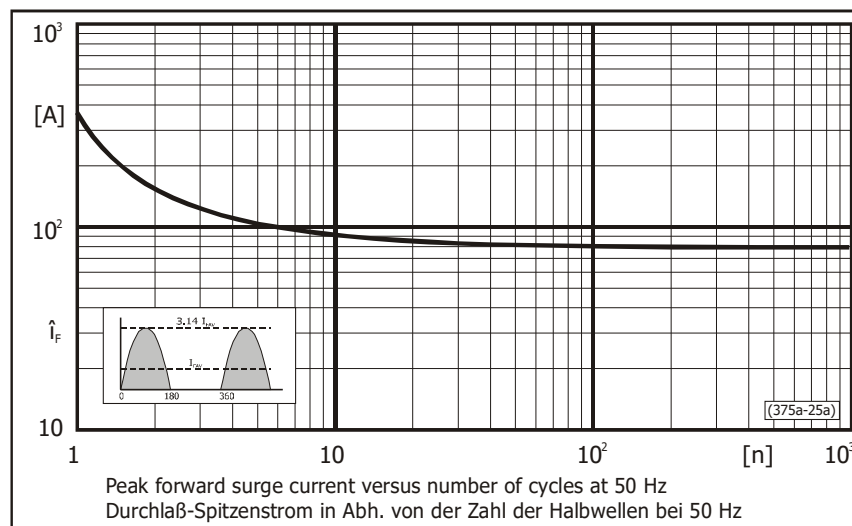
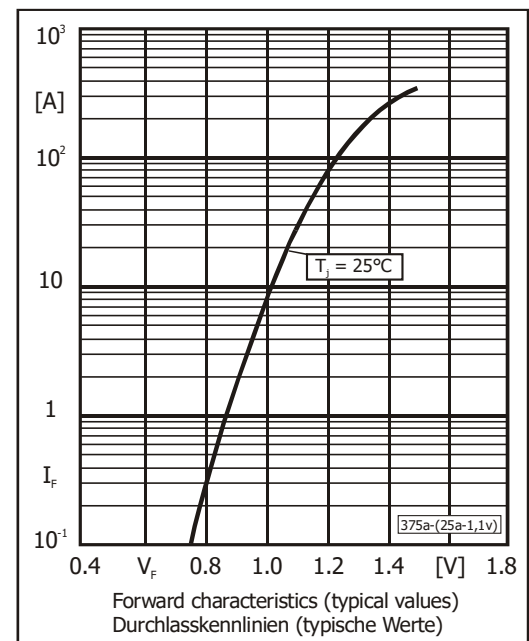
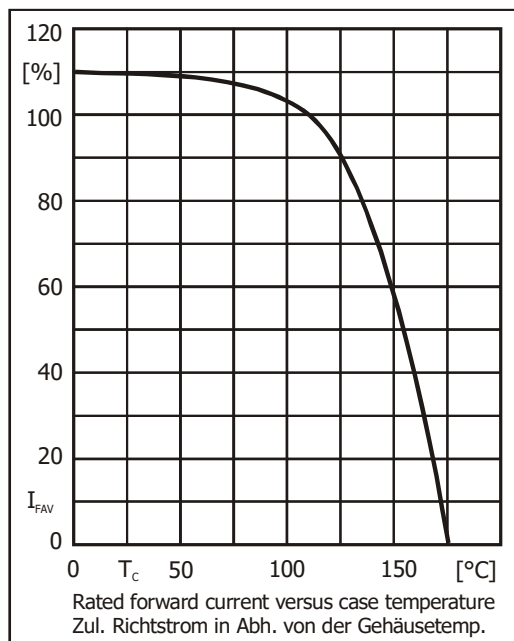
|                                                                                                      |                                        |                                 |                              |
|------------------------------------------------------------------------------------------------------|----------------------------------------|---------------------------------|------------------------------|
| Max. average forward rectified current<br>Dauergrenzstrom in Einwegschaltung                         | $T_C = 110^\circ\text{C} \text{ } ^3)$ | $I_{FAV}$                       | 25 A                         |
| Peak forward surge current<br>Stoßstrom in Fluss-Richtung                                            | Half sine-wave<br>Sinus-Halbwellen     | 50 Hz (10 ms)<br>60 Hz (8.3 ms) | $I_{FSM}$<br>375 A<br>400 A  |
| Rating for fusing<br>Grenzlastintegral                                                               | $t < 10 \text{ ms}$                    | $i^2t$                          | 680 A <sup>2</sup> s         |
| Operating junction temperature – Sperrschichttemperatur<br>Storage temperature – Lagerungstemperatur |                                        | $T_j$<br>$T_s$                  | -50...+175°C<br>-50...+175°C |

- 1 Please note the [detailed information on our website](#) or at the beginning of the data book  
Bitte beachten Sie die [detaillierten Hinweise auf unserer Internetseite](#) bzw. am Anfang des Datenbuches
- 2  $T_A = 25^\circ\text{C}$  unless otherwise specified –  $T_A = 25^\circ\text{C}$  wenn nicht anders angegeben
- 3 Temperature measured at the metallic terminals – Temperatur an den metallischen Anschlüssen gemessen

# Characteristics

## Kennwerte

|                                                                               |                                                       |                     |           |                                                        |
|-------------------------------------------------------------------------------|-------------------------------------------------------|---------------------|-----------|--------------------------------------------------------|
| Forward Voltage<br>Durchlass-Spannung                                         | $T_j = 25^\circ\text{C}$                              | $I_F = 80\text{ A}$ | $V_F$     | $< 1.1\text{ V}$                                       |
| Leakage Current<br>Sperrstrom                                                 | $T_j = 25^\circ\text{C}$<br>$T_j = 100^\circ\text{C}$ | $V_R = V_{RRM}$     | $I_R$     | $< 5\text{ }\mu\text{A}$<br>$< 250\text{ }\mu\text{A}$ |
| Thermal resistance junction to case<br>Wärmewiderstand Sperrschicht – Gehäuse |                                                       |                     | $R_{thc}$ | $< 1.0\text{ K/W}^1)$                                  |



**Disclaimer:** See data book page 2 or [website](#)  
**Haftungsschluss:** Siehe Datenbuch Seite 2 oder [Internet](#)

1 Temperature measured at the metallic terminals – Temperatur an den metallischen Anschlüssen gemessen