



# BAS16VY-Q

## High-speed switching diode

16 June 2021

Product data sheet

### 1. General description

High-speed switching diode, encapsulated in a very small SOT363 (SC-88) Surface-Mounted Device (SMD) plastic package.

### 2. Features and benefits

- High switching speed:  $t_{rr} \leq 4$  ns
- Low capacitance
- Low leakage current
- Reverse voltage:  $V_R \leq 100$  V
- Repetitive peak reverse voltage:  $V_{RRM} \leq 100$  V
- Very small SMD plastic packages
- Qualified according to AEC-Q101 and recommended for use in automotive applications

### 3. Applications

- High-speed switching
- General-purpose switching

### 4. Quick reference data

Table 1. Quick reference data

Symbol	Parameter	Conditions	Min	Typ	Max	Unit
Per diode						
$V_R$	reverse voltage		-	-	100	V
$I_R$	reverse current	$V_R = 80$ V; $T_{amb} = 25$ °C	-	-	0.5	µA
$t_{rr}$	reverse recovery time	$I_F = 10$ mA; $I_R = 10$ mA; $R_L = 100$ Ω; $I_{R(meas)} = 1$ mA; $T_{amb} = 25$ °C	-	-	4	ns



*In accordance with the Absolute Maximum Rating System (IEC 60134).*

[1] Device mounted on an FR4 Printed-Circuit Board (PCB), single-sided copper, tin-plated and standard footprint.  
[2] Single diode loaded.  
[3] Soldering points at pins 4, 5 and 6.

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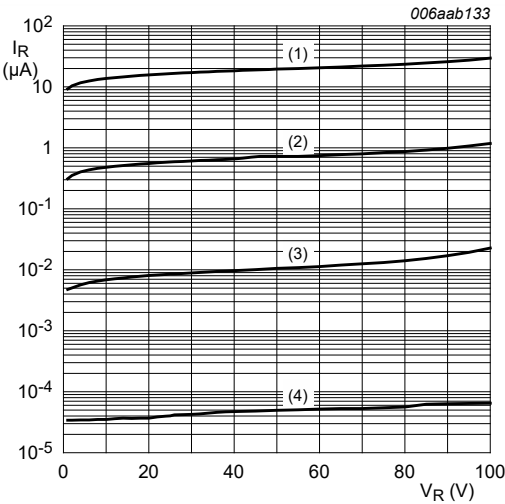


Fig. 3. Reverse current as a function of reverse voltage; typical values

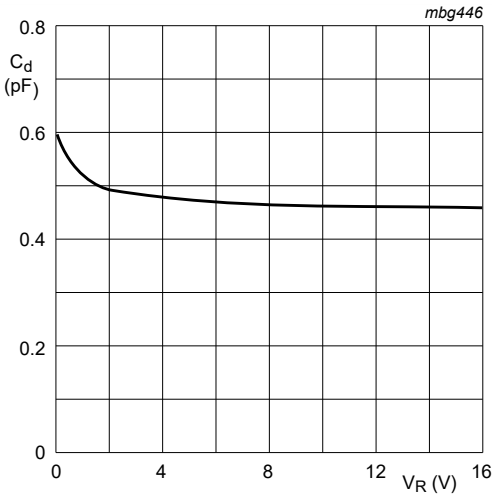
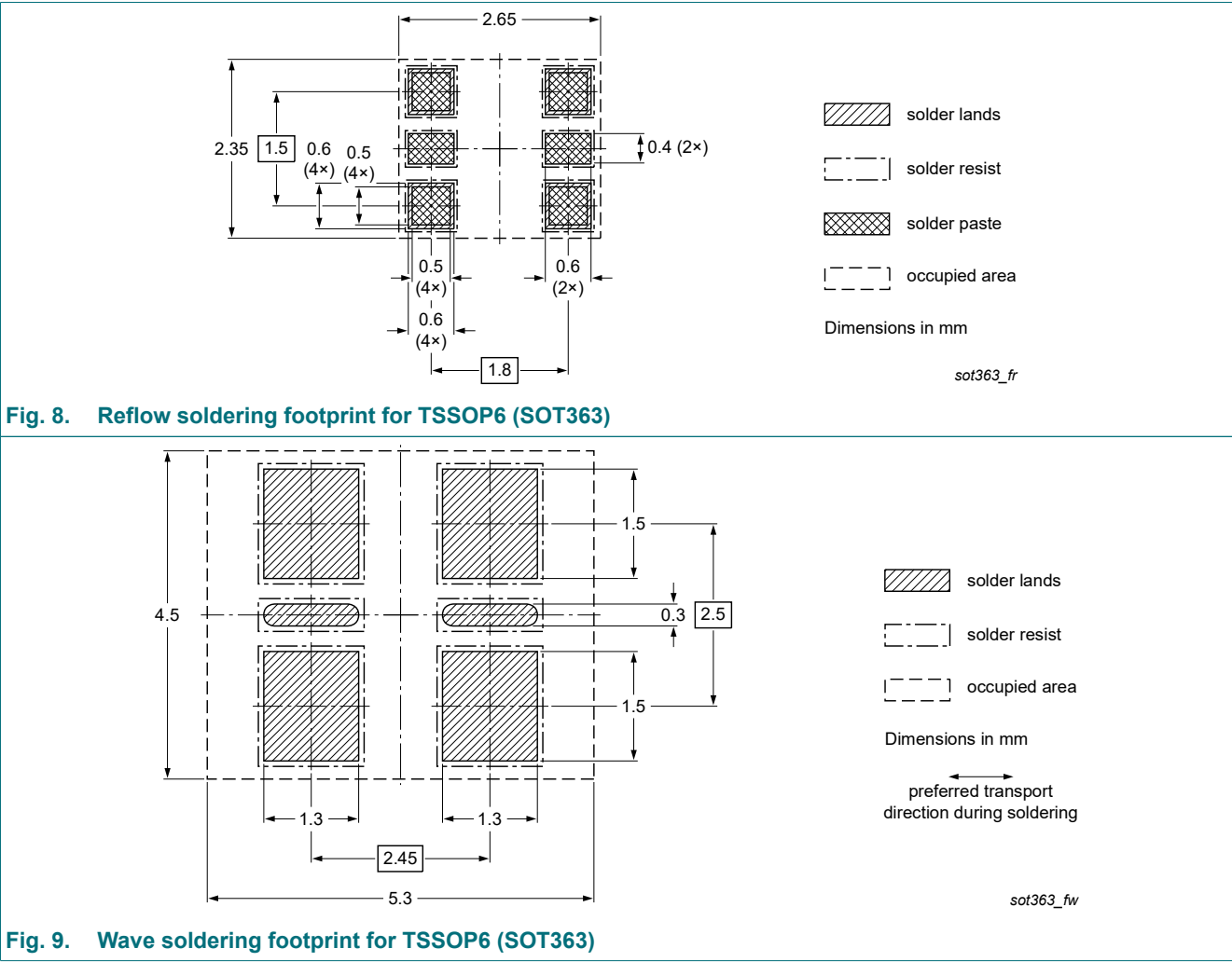


Fig. 4. Diode capacitance as a function of reverse voltage; typical values





13. Soldering





14. Revision history

Table 8. Revision history

Data sheet ID	Release date	Data sheet status	Change notice	Supersedes
BAS16VY-Q v.1	20210616	Product data sheet	-	-

# 15. Legal information

## Data sheet status

Document status [1][2]	Product status [3]	Definition
Objective [short] data sheet	Development	This document contains data from the objective specification for product development.
Preliminary [short] data sheet	Qualification	This document contains data from the preliminary specification.
Product [short] data sheet	Production	This document contains the product specification.

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