



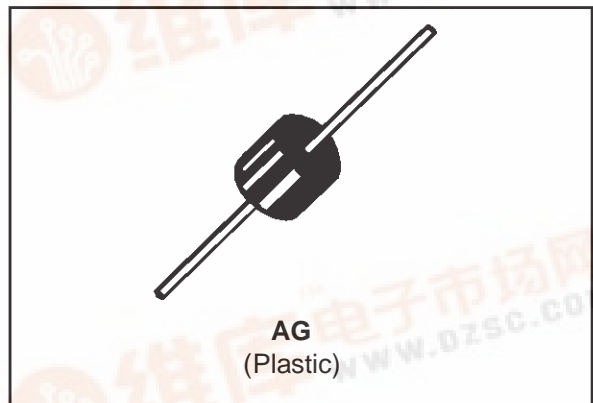
BY214-400 --->1000

RECTIFIER DIODES

MAIN PRODUCTS CHARACTERISTICS

I_{F(av)}	6 A
V_{RRM}	1000 V
V_F (max)	1.2 V

- STANDARD RECTIFIER
- HIGH SURGE CURRENT CAPABILITY
- LOW FORWARD VOLTAGE DROP



ABSOLUTE RATINGS (limiting values)

Symbol	Parameter		Value	Unit
I _{F(AV)}	Average forward current *	T _a =90°C	6	A
I _{FSM}	Surge non repetitive forward current	t _p =10ms sinusoidal	400	A
P _{tot}	Power dissipation *	T _a =90°C	6	W
T _{stg} T _j	Storage and junction temperature range		- 65 to + 150	°C
T _L	Maximum lead temperature for soldering during 10s at 4mm from case		230	°C

* Single phase, half wave, resistive or inductive load.

Symbol	Parameter	BY214-				Unit
		400	600	800	1000	
V _{RRM}	Repetitive peak reverse voltage	400	600	800	1000	V

THERMAL RESISTANCE

Symbol	Parameter	Value	Unit
R _{th} (j-a)	Junction ambient *	10	°C/W

* On infinite heatsink with 10mm lead length

BY214-400 ---> 1000

ELECTRICAL CHARACTERISTICS

Symbol	Test Conditions		Min.	Typ.	Max.	Unit
V_F *	$T_j = 25^\circ\text{C}$	$I_F = 20\text{ A}$			1.2	V
I_R **	$T_j = 100^\circ\text{C}$	$V_R = V_{RRM}$			250	μA

Pulse test : * $t_p = 380\ \mu\text{s}$, duty cycle < 2 %

** $t_p = 5\ \text{ms}$, duty cycle < 2 %

PACKAGE MECHANICAL DATA

AG (Plastic)

REF.	DIMENSIONS				NOTES
	Millimeters		Inches		
	Min.	Max.	Min.	Max.	
A		9		0.354	1- The lead is not controlled within zone L1. 2- The minimum axial length within which the device may be placed bent at right angles is 0.79" (20 mm).
B	20		0.787		
$\varnothing C$		8		0.315	
$\varnothing D$	1.35	1.45	0.053	0.057	
L1		1.27		0.050	

Marking : Type number

Weight : 2.16 g

Information furnished is believed to be accurate and reliable. However, STMicroelectronics assumes no responsibility for the consequences of use of such information nor for any infringement of patents or other rights of third parties which may result from its use. No license is granted by implication or otherwise under any patent or patent rights of STMicroelectronics. Specifications mentioned in this publication are subject to change without notice. This publication supersedes and replaces all information previously supplied. STMicroelectronics products are not authorized for use as critical components in life support devices or systems without express written approval of STMicroelectronics.

The ST logo is a registered trademark of STMicroelectronics

© 1998 STMicroelectronics - Printed in Italy - All rights reserved.

STMicroelectronics GROUP OF COMPANIES

Australia - Brazil - Canada - China - France - Germany - Italy - Japan - Korea - Malaysia - Malta - Mexico - Morocco - The Netherlands - Singapore - Spain - Sweden - Switzerland - Taiwan - Thailand - United Kingdom - U.S.A.