

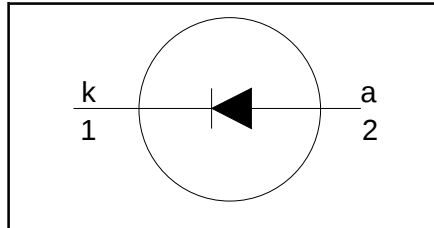
Rectifier diodes fast, soft-recovery

BY229 series

FEATURES

- Low forward volt drop
- Fast switching
- Soft recovery characteristic
- High thermal cycling performance
- Low thermal resistance

SYMBOL



QUICK REFERENCE DATA

 $V_R = 200\text{ V} / 400\text{ V} / 600\text{ V} / 800\text{ V}$
 $I_{F(AV)} = 8\text{ A}$
 $I_{FSM} \leq 60\text{ A}$
 $t_{rr} \leq 135\text{ ns}$

GENERAL DESCRIPTION

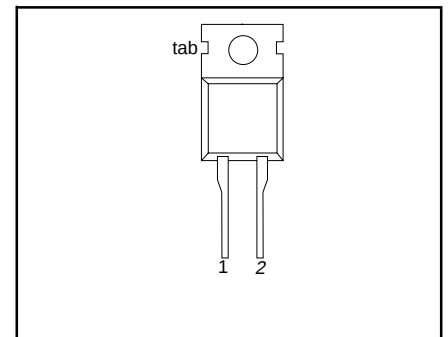
Glass-passivated double diffused rectifier diodes featuring low forward voltage drop, fast reverse recovery and soft recovery characteristic. The devices are intended for use in TV receivers, monitors and switched mode power supplies.

The BY229 series is supplied in the conventional leaded SOD59 (TO220AC) package.

PINNING

PIN	DESCRIPTION
1	cathode
2	anode
tab	cathode

SOD59 (TO220AC)



LIMITING VALUES

Limiting values in accordance with the Absolute Maximum System (IEC 134).

SYMBOL	PARAMETER	CONDITIONS	MIN.	MAX.				UNIT
		BY229		-200	-400	-600	-800	
V_{RSM}	Peak non-repetitive reverse voltage		-	200	400	600	800	V
V_{RRM}	Peak repetitive reverse voltage		-	200	400	600	800	V
V_{RWM}	Crest working reverse voltage		-	150	300	500	600	V
V_R	Continuous reverse voltage		-	150	300	500	600	V
$I_{F(AV)}$	Average forward current ¹	square wave; $\delta = 0.5$; $T_{mb} \leq 122\text{ }^{\circ}\text{C}$	-	8				A
		sinusoidal; $a = 1.57$; $T_{mb} \leq 125\text{ }^{\circ}\text{C}$	-	7				A
$I_{F(RMS)}$	RMS forward current		-	11				A
I_{FRM}	Repetitive peak forward current	$t = 25\text{ }\mu\text{s}$; $\delta = 0.5$; $T_{mb} \leq 122\text{ }^{\circ}\text{C}$	-	16				A
I_{FSM}	Non-repetitive peak forward current.	$t = 10\text{ ms}$	-	60				A
		$t = 8.3\text{ ms}$ sinusoidal; $T_j = 150\text{ }^{\circ}\text{C}$ prior to surge; with reapplied $V_{RWM(max)}$	-	66				A
I^2t	I^2t for fusing	$t = 10\text{ ms}$	-	18				A ² s
T_{stg}	Storage temperature		-40	150				$^{\circ}\text{C}$
T_j	Operating junction temperature		-	150				$^{\circ}\text{C}$

¹ Neglecting switching and reverse current losses.