BY359F-1500, BY359F-1500S

FEATURES

- Low forward volt drop
- · Fast switching
- Soft recovery characteristic
- High thermal cycling performance
 Isolated mounting tab

GENERAL DESCRIPTION

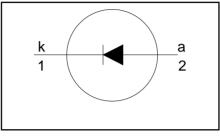
Glass-passivated double diffused

rectifier diode featuring low forward

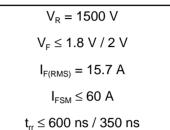
voltage drop, fast reverse recovery and soft recovery characteristic. The device is intended for use in TV

The BY359F series is supplied in the conventional leaded SOD100





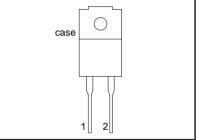
QUICK REFERENCE DATA



PINNING

DESCRIPTION PIN 1 cathode 2 anode isolated tab

SOD100



LIMITING VALUES

package.

receivers and PC monitors.

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

SYMBOL	PARAMETER	CONDITIONS		MIN.	MAX.	UNIT
V _{RSM}	Peak non-repetitive reverse voltage			-	1500	V
V _{RRM}	Peak repetitive reverse voltage			-	1500	V
V _{RWM}	Crest working reverse voltage			-	1300	V
I _{F(peak)}	Peak forward current	16-32kHz TV	BY359F-1500	-	10	Α
r (peak)		31-70kHz monitor	BY359F-1500S	-	7	А
I _{F(RMS)}	RMS forward current			-	15.7	Α
I _{FRM}	Peak repetitive forward current	sinusoidal; a = 1.57		-	60	А
I _{FSM}	Peak non-repetitive forward	t = 10 ms		-	60	A
	current	t = 8.3 ms		-	66	A
		sinusoidal; $T_j = 150 \degree C$ with reapplied $V_{RWM(max)}$	prior to surge;			
T _{stg}	Storage temperature			-40	150	°C
T	Operating junction temperature			-	150	°C

THERMAL RESISTANCES

SYMBOL	PARAMETER	CONDITIONS	MIN.	TYP.	MAX.	UNIT
R _{th j-hs} R _{th j-a}	heatsink	with heatsink compound without heatsink compound in free air.	- -	- - 55	4.8 5.9 -	K/W K/W K/W

Damper diode fast, high-voltage

BY359F-1500, BY359F-1500S

STATIC CHARACTERISTICS

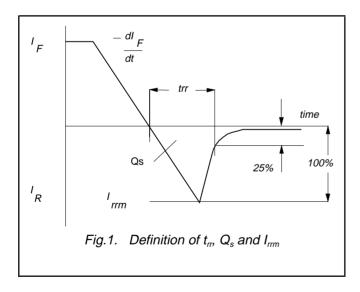
 $T_j = 25$ °C unless otherwise stated

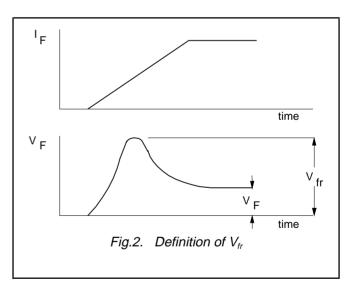
			BY359F-1500		BY359F-1500S		
SYMBOL	PARAMETER	CONDITIONS	TYP.	MAX.	TYP.	MAX.	UNIT
V _F I _R	Forward voltage Reverse current		1.3 1.00 10 50	1.8 1.5 100 300	1.5 1.25 10 100	2.0 1.75 100 600	 4 <li< th=""></li<>

DYNAMIC CHARACTERISTICS

 $T_i = 25$ °C unless otherwise stated

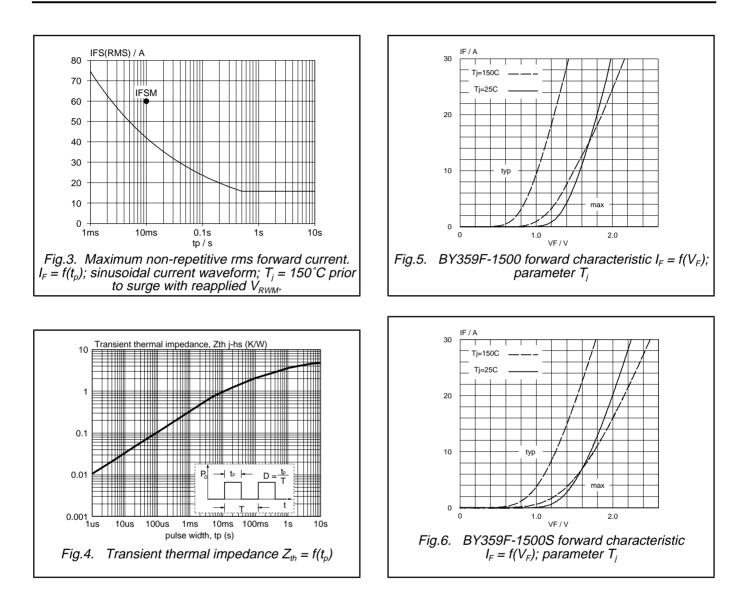
			BY359F-1500		BY359F-1500S			
SYMBOL	PARAMETER	CONDITIONS	TYP.	MAX.	TYP.	MAX.	UNIT	
t _{rr} Q _s	Reverse recovery time Reverse recovery charge	$I_{\rm F} = 2 \text{ A}; V_{\rm R} \ge 30 \text{ V}; \\ -dI_{\rm F}/dt = 20 \text{ A}/\mu \text{s}$	0.47 1.6	0.60 2.0	0.28 0.70	0.35 0.95	μs μC	
V _{fr}	Peak forward recovery voltage	I _F = 10 A; dI _F /dt = 30 A/μs	11.0	-	17.0	-	V	





Damper diode fast, high-voltage

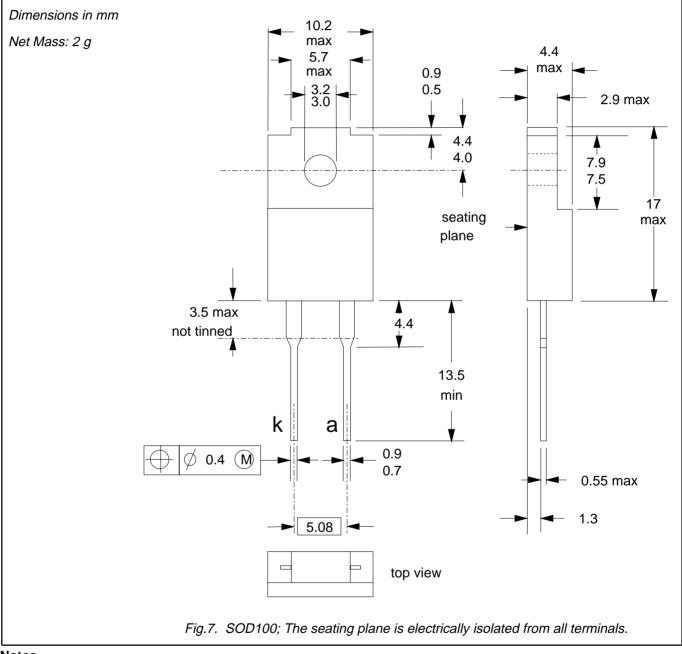
BY359F-1500, BY359F-1500S



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MECHANICAL DATA



Notes

Refer to mounting instructions for F-pack envelopes.
 Epoxy meets UL94 V0 at 1/8".

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DEFINITIONS

Data sheet status					
Objective specification This data sheet contains target or goal specifications for product development.					
Preliminary specification This data sheet contains preliminary data; supplementary data may be published later					
Product specification	This data sheet contains final product specifications.				
Limiting values					
or more of the limiting val operation of the device at	in accordance with the Absolute Maximum Rating System (IEC 134). Stress above one lues may cause permanent damage to the device. These are stress ratings only and t these or at any other conditions above those given in the Characteristics sections of pplied. Exposure to limiting values for extended periods may affect device reliability.				
Where application information is given, it is advisory and does not form part of the specification.					
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