Silicon Bi-directional Trigger Device

BR100/03

GENERAL DESCRIPTION

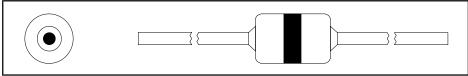
QUICK REFERENCE DATA

Silicon bidirectional trigger device in a glass envelope intended for use in triac and thyristor trigger circuits.

SYMBOL	PARAMETER	MIN.	MAX.	UNIT	
V _(BO)	Breakover voltage	28	36	V	
V _O	Output voltage	7	-	V	
I _{FRM}	Repetitive peak forward current	-	2	A	

OUTLINE - SOD27

SYMBOL





LIMITING VALUES

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

SYMBOL	PARAMETER	CONDITIONS	MIN.	MAX.	UNIT
I _{FRM}	Repetitive peak forward current	$t \le 10 \ \mu s, \ T_a \le 50^{\circ}C; \ f = 60 \ Hz$	-	2	А
$\begin{bmatrix} P_{tot} \\ T_{stg} \\ T_j \end{bmatrix}$	Total power dissipation Storage temperature Operating junction temperature	$T_a = 50$ °C	- -55 -	150 125 100	mW °C °C

THERMAL RESISTANCES

SYMBOL	PARAMETER	CONDITIONS	MIN.	TYP.	MAX.	UNIT
R _{th j-a}	Thermal resistance junction to ambient	in free air	-	330	-	K/W
R _{th j-lead}	Thermal resistance junction to leads		-	150	-	K/W

CHARACTERISTICS

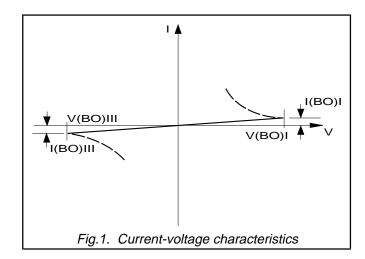
 $T_a = 25$ °C unless otherwise stated.

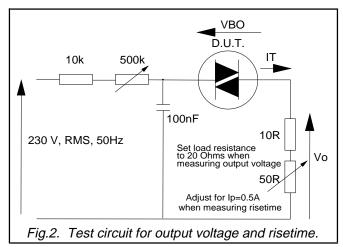
SYMBOL	PARAMETER	CONDITIONS	MIN.	TYP.	MAX.	UNIT
V _(BO)	Breakover voltage	$I = I_{(BO)}$	28	32	36	V
$V_{O}^{(BO)+}$ - $V_{(BO)-}$	Breakover voltage symmetry Output voltage	$I = I_{(BO)}$, see fig: 1 R ₁ = 20 Ω; Circuit of fig: 2	7	-	3.5	$\mid \ \ \ \ \ \ \mid$
lı "	Breakover current	$V = V_{(BO)}$	-	-	50	μΑ
$dV_{(BO)}/dT$	Temperature coefficient of		-	0.1	-	%/K
t _r	Risetime	I _p = 0.5 A; Circuit of fig: 2	-	1.5		μs

Philips Semiconductors Product Specification

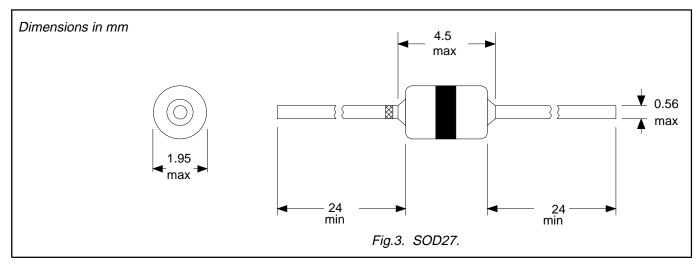
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MECHANICAL DATA



Silicon Bi-directional Trigger Device

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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.			
Limitin arrealises				

Limiting values

Limiting values are given in accordance with the Absolute Maximum Rating System (IEC 134). Stress above one or more of the limiting values may cause permanent damage to the device. These are stress ratings only and operation of the device at these or at any other conditions above those given in the Characteristics sections of this specification is not implied. Exposure to limiting values for extended periods may affect device reliability.

Application information

Where application information is given, it is advisory and does not form part of the specification.

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