

500 mW SOD27 Hermetically Sealed Glass Fast Switching Diodes

Absolute Maximum Ratings T_A = 25°C unless otherwise noted

Symbol	Parameter	Value	Units	
P _D	Power Dissipation	500	mW	
V _{RRM}	Repetitive Peak Reverse Voltage	100	V	
V _R	Continuous Reverse Voltage	100	V	
I _F	Continuous Forward Current(see Fig. 2)	200	mA	
I _{FRM}	Repetitive Peak Forward Current	450	mA	
T _{STG}	Storage Temperature Range	-65 to +200	°C	
T _J	Operating Junction Temperature	+200	°C	
I _{FSM}	Non-Repetitive Peak Forward Current	4	A	
	Pulse Width : 1.0 μs			1
	(see Fig.4) 1.0 ms			0.5

Device mounted on an FR4 printed-circuit board; lead length 10 mm

Specification Features:

- § Fast Switching Device (T_{RR} < 4.0 nS)
- § SOD27(DO-35) Package
- § Through-Hole Device Type Mounting
- § Hermetically Sealed Glass
- § Compression Bonded Construction
- § All External Surfaces Are Corrosion Resistant And Leads Are Readily Solderable
- § RoHS Compliant and Halogen Free
- § Solder Hot Dip Tin (Sn) Terminal Finish
- § Cathode Indicated By Polarity Band

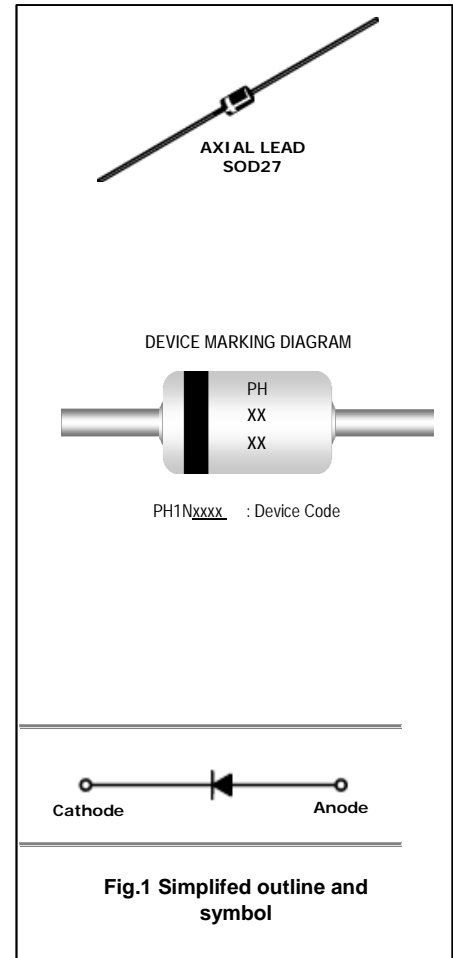
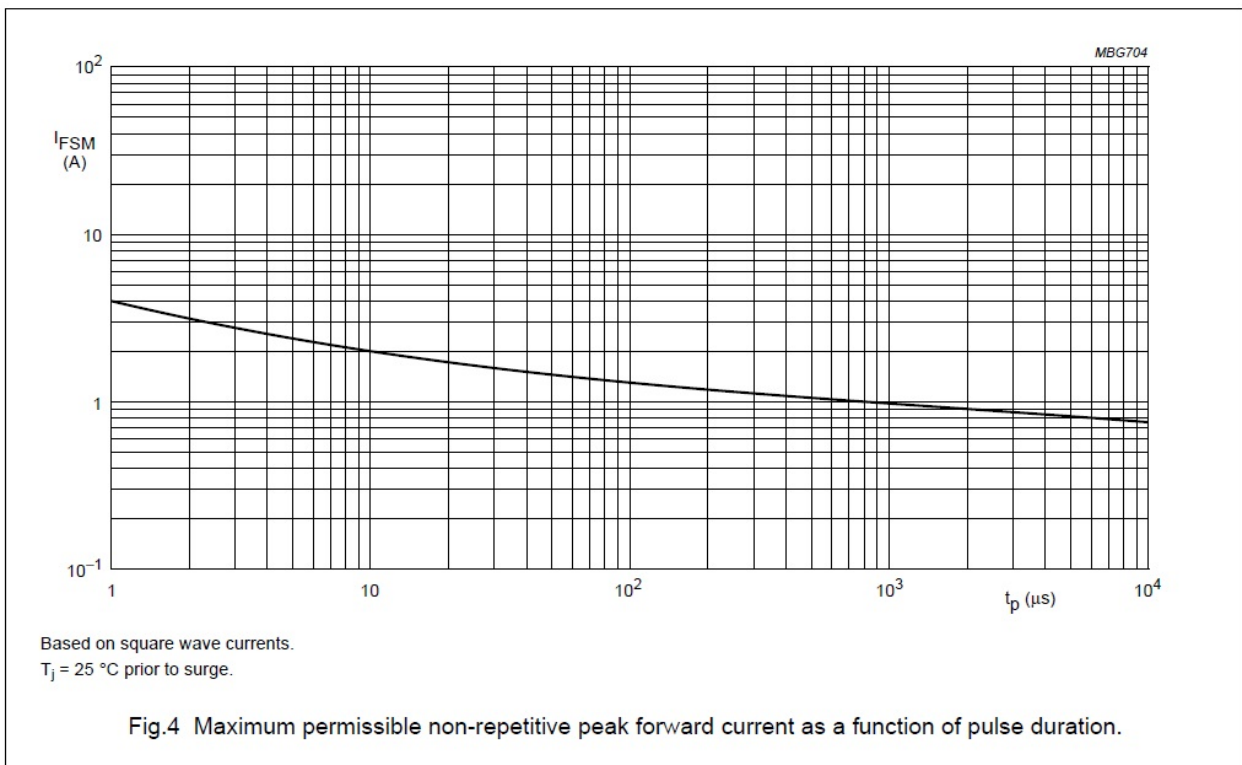
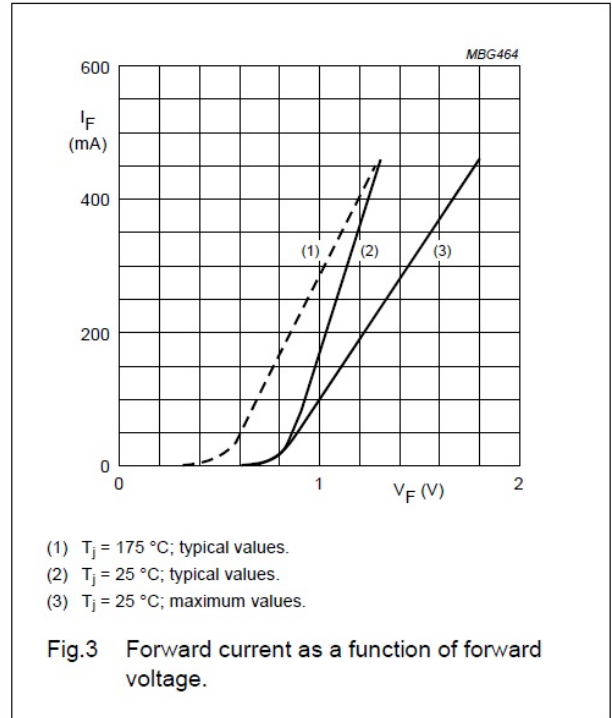
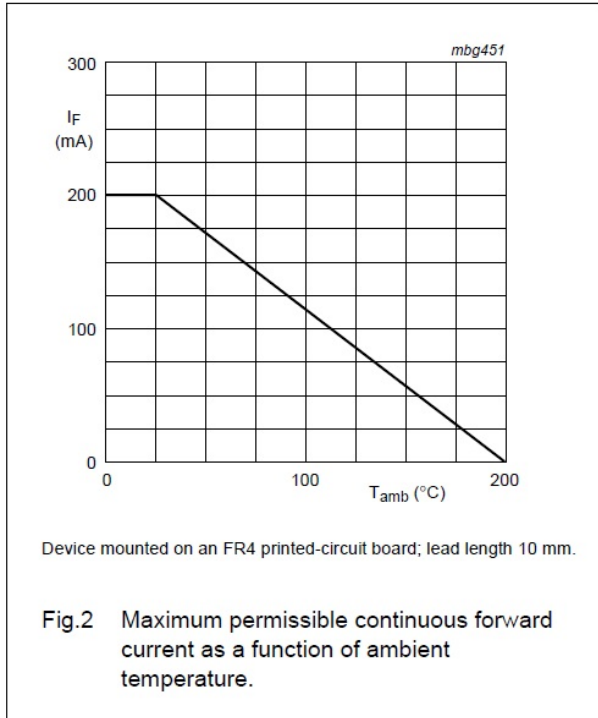


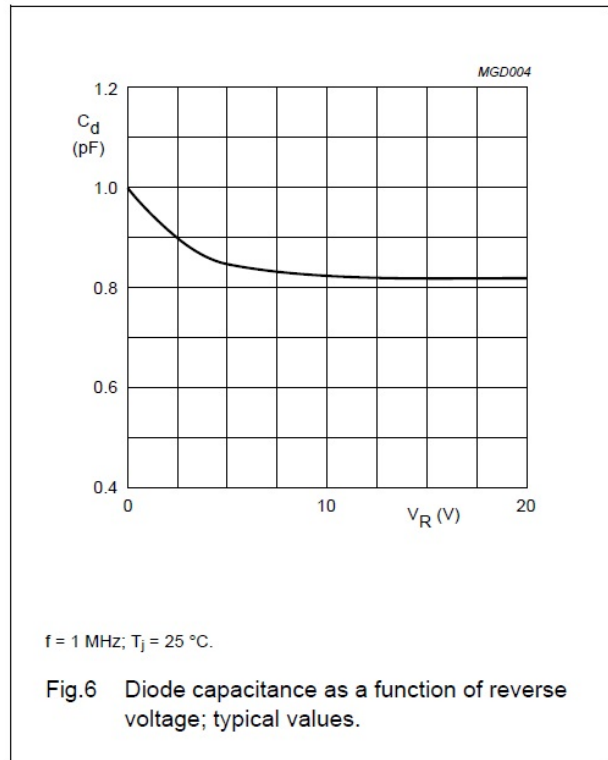
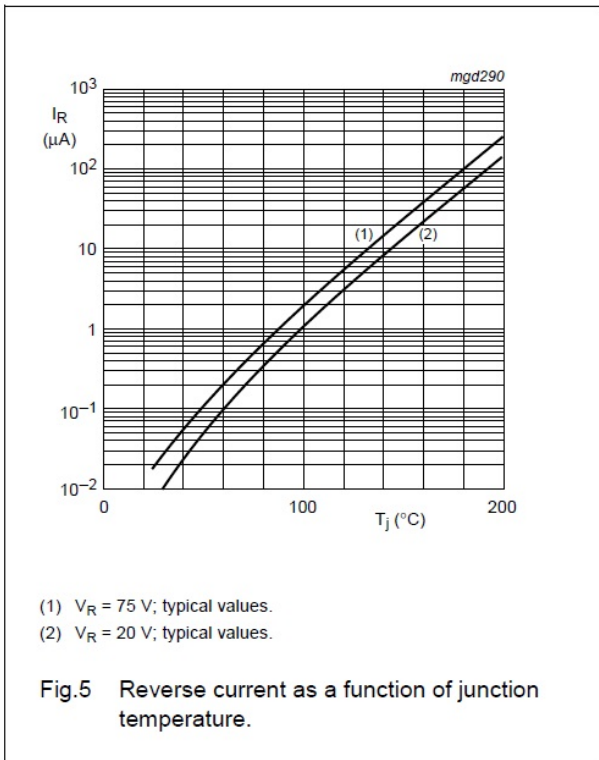
Fig.1 Simplified outline and symbol

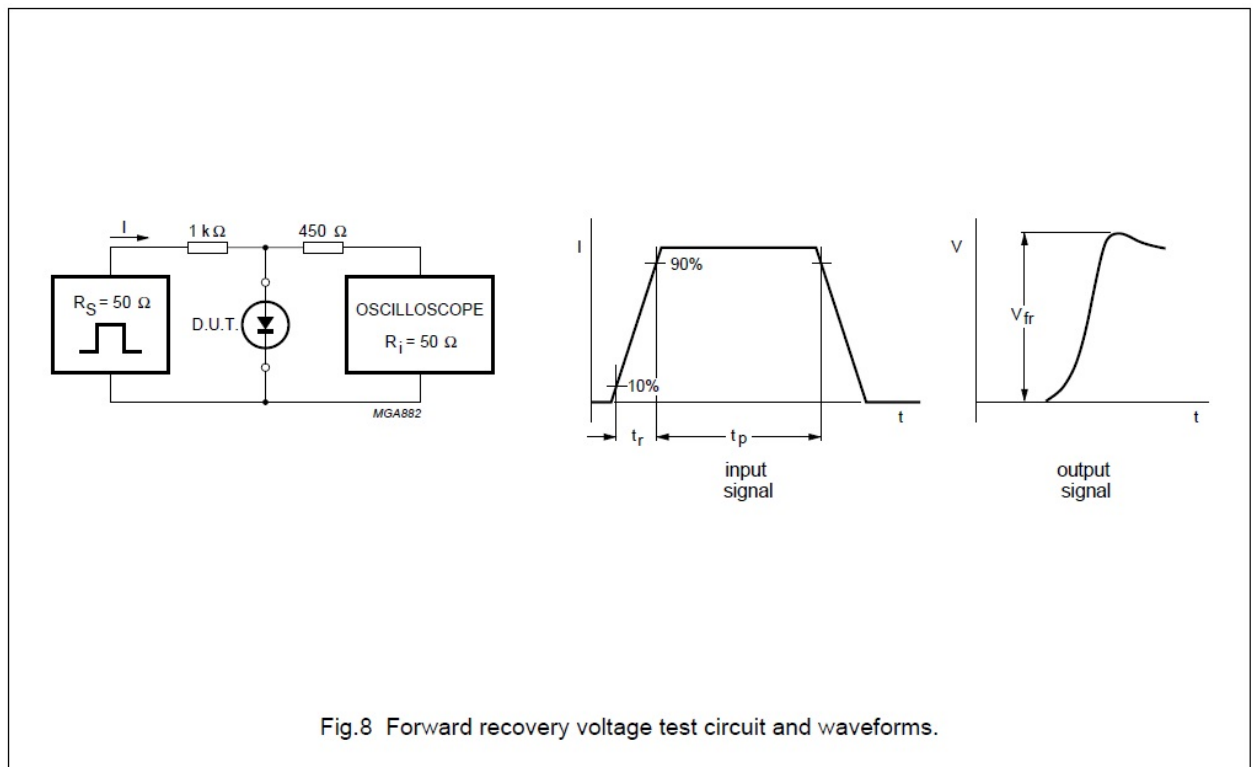
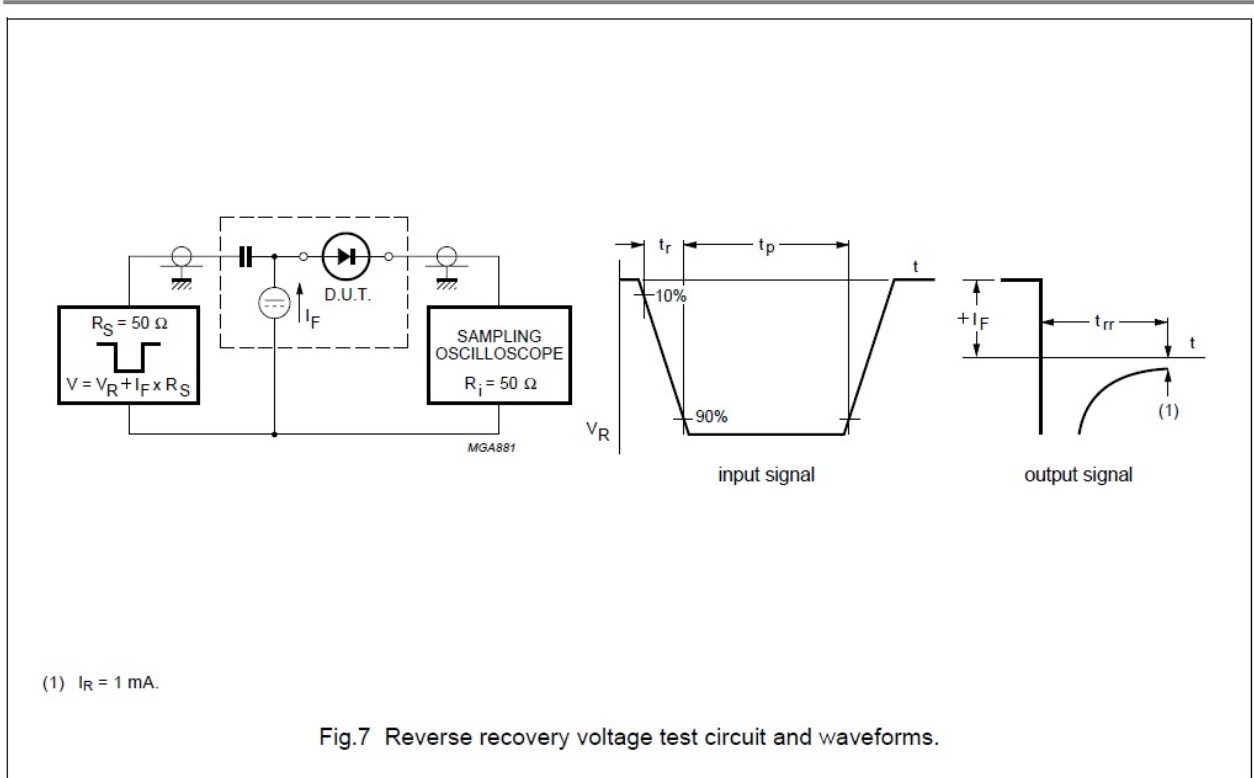
Electrical Characteristics T_A = 25°C unless otherwise noted

Symbol	Parameter	Test Condition	Limits		Unit
			Min	Max	
V _F	Forward Voltage (see Fig.3)	PH1N4148 I _F =10mA	0.62	1.0	V
		PH1N4448 I _F =5mA		0.72	
		PH1N4448 I _F =100mA		1.0	
I _R	Reverse Current (see Fig.5)	PH1N4148/PH1N4448 V _R =20V		25	nA
		PH1N4148/PH1N4448 V _R =20V, T _j =150°C		50	μA
		PH1N4448 V _R =20V, T _j =100°C		3	μA
C	Capacitance (see Fig.6)	V _R =0V, f=1MHz		4	pF
T _{RR}	Reverse Recovery Time (see Fig.7)	when switched from I _F =10mA to I _R =60mA; R _L =100Ω measured at I _R =1mA		4	ns
V _{fr}	Forward Recovery Voltage(see Fig.8)	when switched from I _F =50mA, T _F =20ns		2.5	V
R _{th(j-tp)}	Thermal Resistance Form Junction To Tie-Point	Lead Length 10mm		240	K/W
R _{th(j-a)}	Thermal Resistance Form Junction To Ambient	Lead Length 10mm		350	K/W

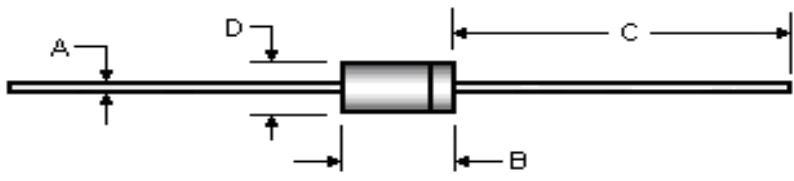
Typical Characteristics







Package Outline

Package	Case Outline				
DO-35					
	SOD27(DO-35)				
	DIM	Millimeters		Inches	
		Min	Max	Min	Max
	A	0.46	0.56	0.018	0.022
	B	3.05	4.25	0.120	0.167
C	25.40	38.10	1.000	1.500	
D	1.53	1.85	0.060	0.073	

Notes:

1. All dimensions are within JEDEC standard.
2. DO35 polarity denoted by cathode band.

NOTICE

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