BY500-100, BY500-200, BY500-400, BY500-600, BY500-800

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Vishay General Semiconductor

ELECTRICAL CHARACTERISTICS (T _A = 25 °C unless otherwise noted)									
PARAMETER	TEST CONDITIONS		SYMBOL	BY500-100	BY500-200	BY500-400	BY500-600	BY500-800	UNIT
Maximum instantaneous forward voltage	5.0 A		V _F	1.35					v
Maximum DC reverse current at rated DC blocking voltage		T _A = 25 °C		10					μA
		T _A = 100 °C	I _R			1.0			mA
Maximum reverse recovery time	I _F = 1.0 A, V _R = 30 V, dl/dt = 50 A/μs, I _{rr} = 10 % I _{RM}		t _{rr}	200				ns	
Maximum reverse recovery current			I _{RM(REC)}	2.0				А	
Typical junction capacitance	4.0 V, 1 MHz		CJ	28			pF		

THERMAL CHARACTERISTICS ($T_A = 25 \text{ °C}$ unless otherwise noted)							
PARAMETER	SYMBOL	BY500-100	BY500-200	BY500-400	BY500-600	BY500-800	UNIT
Typical thermal resistance	R _{0JA} ⁽¹⁾	22				°C/W	

Note

ISHA

⁽¹⁾ Thermal resistance from junction to ambient at 0.375" (9.5 mm) lead length with both leads to heat sink

ORDERING INFORMATION (Example)							
PREFERRED P/N	UNIT WEIGHT (g)	PREFERRED PACKAGE CODE	BASE QUANTITY	DELIVERY MODE			
BY500-400-E3/54	1.1	54	1400	13" diameter paper tape and reel			
BY500-400-E3/73	1.1	73	1000	Ammo pack packaging			

RATINGS AND CHARACTERISTICS CURVES (T_A = 25 °C unless otherwise noted)

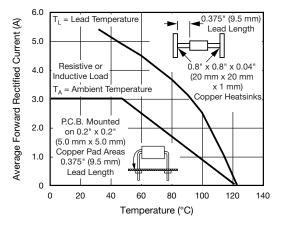


Fig. 1 - Forward Current Derating Curves

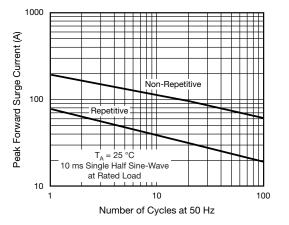
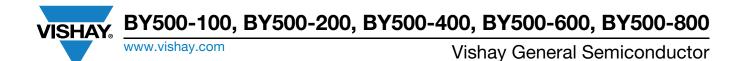


Fig. 2 - Maximum Peak Forward Surge Current

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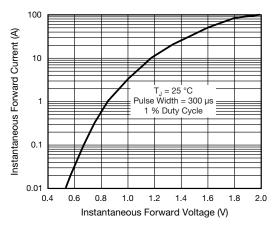


Fig. 3 - Typical Instantaneous Forward Characteristics

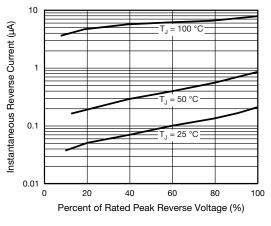
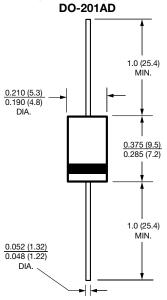


Fig. 4 - Typical Reverse Characteristics

PACKAGE OUTLINE DIMENSIONS in inches (millimeters)



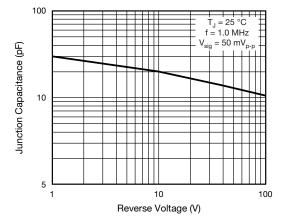


Fig. 5 - Typical Junction Capacitance

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