

BY251GP, BY252GP, BY253GP, BY254GP, BY255GP

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### Vishay General Semiconductor

<b>ELECTRICAL CHARACTERISTICS</b> ( $T_A = 25 \text{ °C}$ unless otherwise noted)									
PARAMETER	TEST CONDITIONS		SYMBOL	BY251GP	BY252GP	BY253GP	BY254GP	BY255GP	UNIT
Maximum instantaneous forward voltage	3.0 A	0 A V <sub>F</sub> 1.1			V				
Maximum reverse current at rated DC blocking voltage		T <sub>A</sub> = 25 °C	I <sub>R</sub>			5.0			μA
Maximum reverse recovery time	I <sub>F</sub> = 0.5 A, I <sub>R</sub> = 1.0 V, I <sub>rr</sub> = 0.25 A		t <sub>rr</sub>	3.0				μs	
Typical junction capacitance	4.0 V, 1 MHz		CJ	40					pF

<b>THERMAL CHARACTERISTICS</b> ( $T_A = 25 \text{ °C}$ unless otherwise noted)								
PARAMETER	SYMBOL	BY251GP	BY252GP	BY253GP	BY254GP	BY255GP	UNIT	
Typical thermal resistance	R <sub>0JA</sub> <sup>(1)</sup>	20					°C/W	
Typical mermanesistance	R <sub>0JL</sub> <sup>(1)</sup>	10						

#### Note

<sup>(1)</sup> Thermal resistance from junction to ambient and from junction to lead at 0.375" (9.5 mm) lead length, PCB mounted

ORDERING INFORMATION (Example)							
PREFERRED P/N	UNIT WEIGHT (g)	PREFERRED PACKAGE CODE	BASE QUANTITY	DELIVERY MODE			
BY253GP-E3/54	1.28	54	1400	13" diameter paper tape and reel			
BY253GP-E3/73	1.28	73	1000	Ammo pack packaging			

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

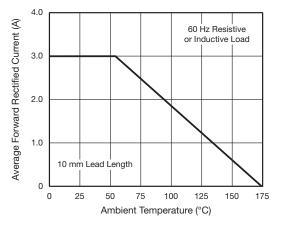


Fig. 1 - Forward Current Derating Curve

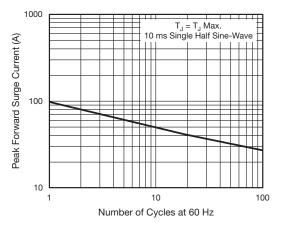


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current



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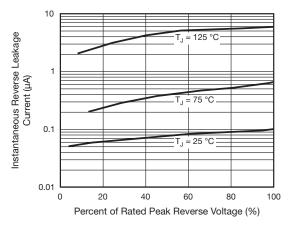


Fig. 3 - Maximum Non-Repetitive Peak Forward Surge Current

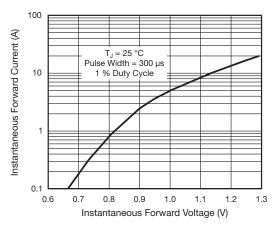
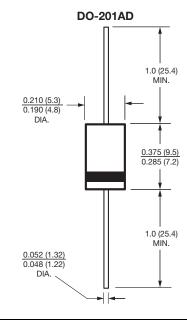


Fig. 4 - Typical Instantaneous Forward Characteristics

#### PACKAGE OUTLINE DIMENSIONS in inches (millimeters)



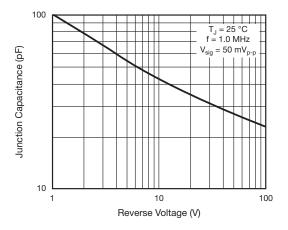


Fig. 5 - Typical Junction Capacitance

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