GPP20A, GPP20B, GPP20D, GPP20G, GPP20J, GPP20K, GPP20M



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Glass Passivated Junction Plastic Rectifier



PRIMARY CHARACTERISTICS							
I _{F(AV)}	2.0 A						
V _{RRM}	50 V, 100 V, 200 V, 400 V, 600 V, 800 V, 1000 V						
I _{FSM}	70 A						
I _R	5.0 µA						
V _F at I _F = 2.0 A	1.1 V						
T _J max.	150 °C						
Package	DO-15 (DO-204AC)						
Circuit configuration	Single						

FEATURES

- · Glass passivated chip junction
- · Low forward voltage drop
- Low leakage current, typical I_B less than 0.1 µA
- · High forward surge capability
- Meets environmental standard MIL-S-19500
- Solder dip 275 °C max. 10 s, per JESD 22-B106
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

TYPICAL APPLICATIONS

For use in general purpose rectification of power supplies, inverters, converters and freewheeling diodes application.

MECHANICAL DATA

Case: DO-15 (DO-204AC), molded epoxy over passivated chip

Molding compound meets UL 94 V-0 flammability rating Base P/N-E3 - RoHS-compliant, commercial grade

Terminals: matte tin plated leads, solderable per J-STD-002 and JESD 22-B102

E3 suffix meets JESD 201 class 1A whisker test

Polarity: color band denotes cathode end

MAXIMUM RATINGS ($T_A = 25 \text{ °C}$ unless otherwise noted)									
PARAMETER	SYMBOL	GPP20A	GPP20B	GPP20D	GPP20G	GPP20J	GPP20K	GPP20M	UNIT
Max. repetitive peak reverse voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Max. RMS voltage	V _{RMS}	35	70	140	280	420	560	700	V
Max. DC blocking voltage	V _{DC}	50	100	200	400	600	800	1000	V
Max. average forward rectified current 0.375" (9.5 mm) lead length at T_A = 55 °C	I _{F(AV)}		2.0						
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	I _{FSM}	70							А
Operating junction and storage temperature range	T _J , T _{STG}	-55 to +150						°C	



COMPLIANT

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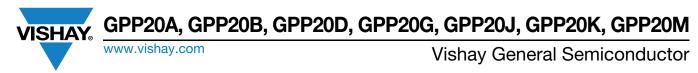
ELECTRICAL CHARACTERISTICS ($T_A = 25 \text{ °C}$ unless otherwise noted)											
PARAMETER	TEST CONDITIONS		SYMBOL	GPP20A	GPP20B	GPP20D	GPP20G	GPP20J	GPP20K	GPP20M	UNIT
Max. instantaneous forward voltage	2.0 A		V _F	1.1					v		
Max. reverse current at rated DC blocking		T _A = 25 °C	1-	5.0						- μΑ	
voltage		T _A = 100 °C	IR	50							
Max. junction capacitance	4.0 V,	1 MHz	CJ	12				pF			

THERMAL CHARACTERISTICS ($T_A = 25 \text{ °C}$ unless otherwise noted)									
PARAMETER	SYMBOL GPP20A GPP20B GPP20D GPP20G GPP20J GPP20K GPP20M UN							UNIT	
Typical thermal resistance	R _{0JA} ⁽¹⁾	25							°C/W
Typical thermal resistance	R _{0JL} ⁽¹⁾	1) 20					0/11		

Note

⁽¹⁾ 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					
GPP20J-E3/54	0.417	54	4000	13" diameter paper tape and reel					
GPP20J-E3/73	0.417	73	2000	Ammo pack packaging					



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

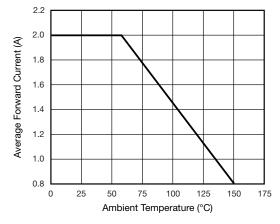


Fig. 1 - Forward Current Derating Curve

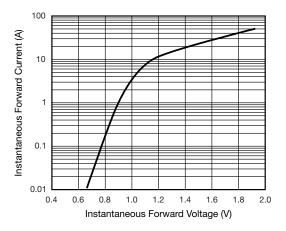


Fig. 2 - Typical Instantaneous Forward Characteristics

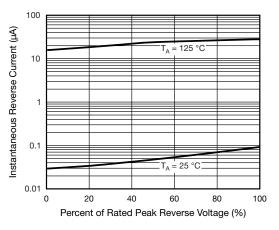


Fig. 3 - Typical Reverse Characteristics

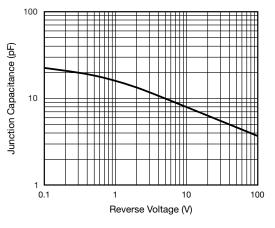


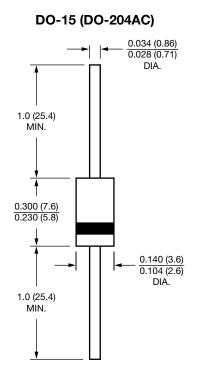
Fig. 4 - Typical Junction Capacitance

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PACKAGE OUTLINE DIMENSIONS in inches (millimeters)





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