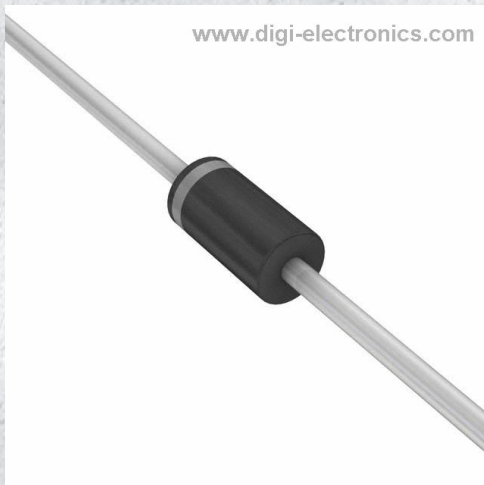


RGP02-17EHE3/73 Datasheet



<https://www.DiGi-Electronics.com>

DiGi Electronics Part Number	RGP02-17EHE3/73-DG
Manufacturer	Vishay General Semiconductor - Diodes Division
Manufacturer Product Number	RGP02-17EHE3/73
Description	DIODE GP 1.7KV 500MA DO204AL
Detailed Description	Diode 1700 V 500mA Through Hole DO-204AL (DO-41)

This model RGP02-17EHE3/73 is available at DiGi Electronics.

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Purchase and inquiry

Manufacturer Product Number:

RGP02-17EHE3/73

Series:

SUPERECTIFIER®

Technology:

Standard

Current - Average Rectified (Io):

500mA

Speed:

Fast Recovery =< 500ns, > 200mA (Io)

Current - Reverse Leakage @ Vr:

5 µA @ 1700 V

Mounting Type:

Through Hole

Supplier Device Package:

DO-204AL (DO-41)

Base Product Number:

RGP02

Manufacturer:

Vishay General Semiconductor - Diodes Division

Product Status:

Obsolete

Voltage - DC Reverse (Vr) (Max):

1700 V

Voltage - Forward (Vf) (Max) @ If:

1.8 V @ 100 mA

Reverse Recovery Time (trr):

300 ns

Capacitance @ Vr, F:

-

Package / Case:

DO-204AL, DO-41, Axial

Operating Temperature - Junction:

-65°C ~ 175°C

Environmental & Export classification

RoHS Status:

ROHS3 Compliant

REACH Status:

REACH Unaffected

HTSUS:

8541.10.0070

Moisture Sensitivity Level (MSL):

1 (Unlimited)

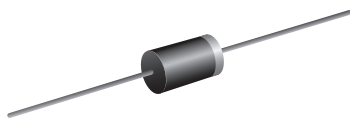
ECCN:

EAR99



Glass Passivated Junction Fast Switching Plastic Rectifier

SUPERECTIFIER®



DO-41 (DO-204AL)

FEATURES

- Superectifier structure for high reliability condition
- Cavity-free glass-passivated junction
- Fast switching for high efficiency
- Low leakage current, typical I_R less than $0.2 \mu\text{A}$
- High forward surge capability
- Solder dip 275°C max. 10 s, per JESD 22-B106
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912



RoHS
COMPLIANT

TYPICAL APPLICATIONS

High voltage rectification of G2 grid CRT and TV, snubber circuit of camera flash.

MECHANICAL DATA

Case: DO-41 (DO-204AL), molded epoxy over glass body
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

PRIMARY CHARACTERISTICS	
$I_{F(AV)}$	0.5 A
V_{RRM}	1200 V to 2000 V
I_{FSM}	20 A
V_F	1.8 V
t_{tr}	300 ns
I_R	$5.0 \mu\text{A}$
T_J max.	175°C
Package	DO-41 (DO-204AL)
Circuit configuration	Single

MAXIMUM RATINGS ($T_A = 25^\circ\text{C}$ unless otherwise noted)									
PARAMETER	SYMBOL	RGP02-12E	RGP02-14E	RGP02-15E	RGP02-16E	RGP02-17E	RGP02-18E	RGP02-20E	UNIT
Maximum repetitive peak reverse voltage	V_{RRM}	1200	1400	1500	1600	1700	1800	2000	V
Maximum RMS voltage	V_{RMS}	840	980	1050	1120	1190	1260	1400	V
Maximum DC blocking voltage	V_{DC}	1200	1400	1500	1600	1700	1800	2000	V
Maximum average forward rectified current 0.375" (9.5 mm) lead length at $T_A = 55^\circ\text{C}$	$I_{F(AV)}$	0.5							A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated	I_{FSM}	20							A
Operating junction and storage temperature range	T_J, T_{STG}	-65 to +175							$^\circ\text{C}$



ELECTRICAL CHARACTERISTICS ($T_A = 25\text{ }^\circ\text{C}$ unless otherwise noted)

PARAMETER	TEST CONDITIONS	SYMBOL	RGP02-12E	RGP02-14E	RGP02-15E	RGP02-16E	RGP02-17E	RGP02-18E	RGP02-20E	UNIT
Maximum instantaneous forward voltage	0.1 A	V_F	1.8							V
Maximum DC reverse current at rated DC blocking voltage	$T_A = 25\text{ }^\circ\text{C}$	I_R	5.0							μA
	$T_A = 125\text{ }^\circ\text{C}$		50							
Maximum reverse recovery time	$I_F = 0.5\text{ A}$, $I_R = 1.0\text{ A}$, $I_{rr} = 0.25\text{ A}$	t_{rr}	300							ns

THERMAL CHARACTERISTICS ($T_A = 25\text{ }^\circ\text{C}$ unless otherwise noted)

PARAMETER	SYMBOL	RGP02-12E	RGP02-14E	RGP02-15E	RGP02-16E	RGP02-17E	RGP02-18E	RGP02-20E	UNIT
Typical thermal resistance	$R_{\theta JA}^{(1)}$	65							$^\circ\text{C/W}$
	$R_{\theta JL}^{(1)}$	30							

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
RGP02-12E-E3/54	0.24	54	5500	13" diameter paper tape and reel
RGP02-12E-E3/73	0.24	73	3000	Ammo pack packaging

RATINGS AND CHARACTERISTICS CURVES ($T_A = 25\text{ }^\circ\text{C}$ unless otherwise noted)

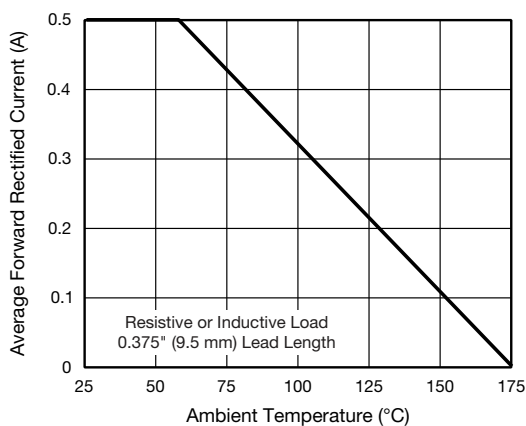


Fig. 1 - Forward Current Derating Curve

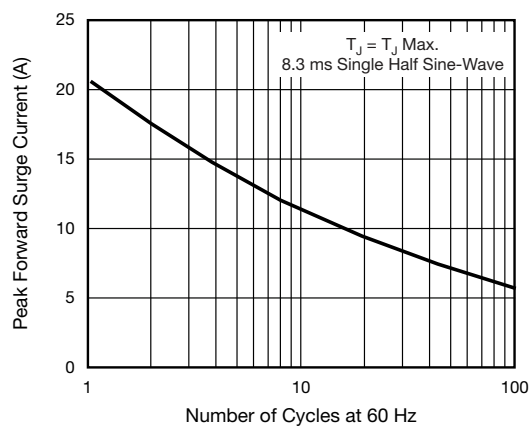


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

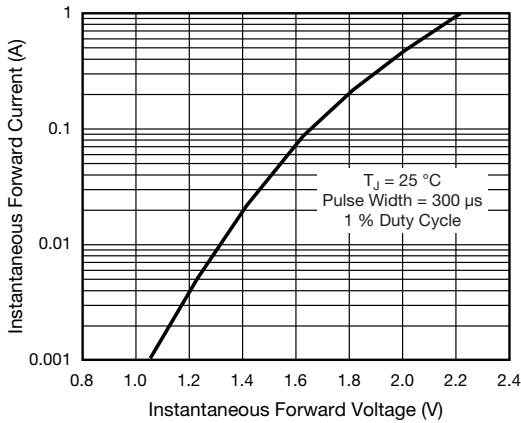


Fig. 3 - Typical Instantaneous Forward Characteristics

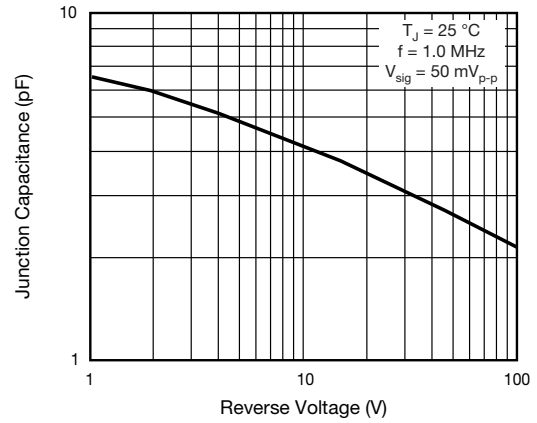


Fig. 5 - Typical Junction Capacitance

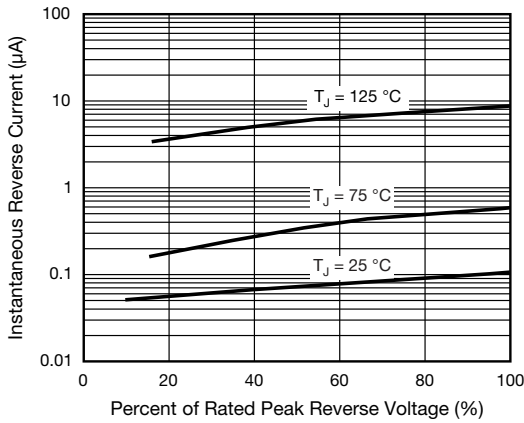
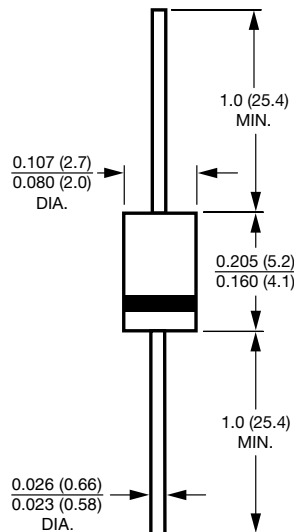


Fig. 4 - Typical Reverse Characteristics

PACKAGE OUTLINE DIMENSIONS in inches (millimeters)

DO-41 (DO-204AL)





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