

Glass Passivated Fast Recovery Rectifiers
DO-41(DO-204AL)

Features

- ROHS compliant
- Glass passivated chip
- High forward surge capability
- Meet MSL level 1, per J-STD-020
LF maximum peak of 250 °C
- Solder dip 260 °C / 40S
- Component in accordance to ROHS 2002/95/EC and WEEE 2002/96/WC
- UL recognition, file number E342874


Primary characteristics

$I_{F(AV)}$	1A
V_{RRM}	400V to 1000V
I_{FSM}	20A
I_{RM}	5 μ A
V_{FM} at $I_F=1$ A	1.3V
T_J max.	150 °C

Applications

Ideal for ac-to-dc bridge full wave rectification such as SMPS, home appliances, office equipment, industrial automation applications

Mechanical data

- DO-41(DO-204AL)
- Epoxy meets UL 94 V-0 flammability rating
- Terminals: Tin plated leads.
- Polarity: As marked.
- Mounting Torque:10cm·kg(8.8 inches·lbs)max.
- Recommended Torque:5.7 cm·kg(5 inches·lbs)

Maximum rating (Ta=25°C unless otherwise noted)

Parameter	Sym	DO-41(DO-204AL)				Unit
		BA157G	BA158G	BA159DG	BA159G	
Max. repetitive peak reverse voltage	V_{RRM}	400	600	800	1000	V
Max. RMS reverse voltage	V_{RMS}	280	420	560	700	V
Max. DC blocking voltage	V_{DC}	400	600	800	1000	V
Max. average forward current	$I_{F(AV)}$	1				A
Non-repetitive peak forward surge current 8.3ms single half-sine-wave	I_{FSM}	20				A
Max. instantaneous forward voltage drop per diode	V_{FM}	1.3 (1A)				V
Max. instantaneous reverse current at rated DC blocking voltage	I_{RM}	5				μ A
Operating junction temperature	T_J	-55 ~ +150				°C
Storage temperature	T_{STG}	-55 ~ +150				°C
Maximum reverse recovery time (Note 1)	t_{rr}	150	250	500		nS
Typical thermal resistance (Note 2)	$R_{\theta JA}$	55				oC/W
Typical junction capacitance (Note 3)	C_J	15				pF

Notes:

1 Reverse recovery test conditions: $I_F=0.5A$, $I_R=1.0A$, $I_{rr}=0.25A$

2 Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted

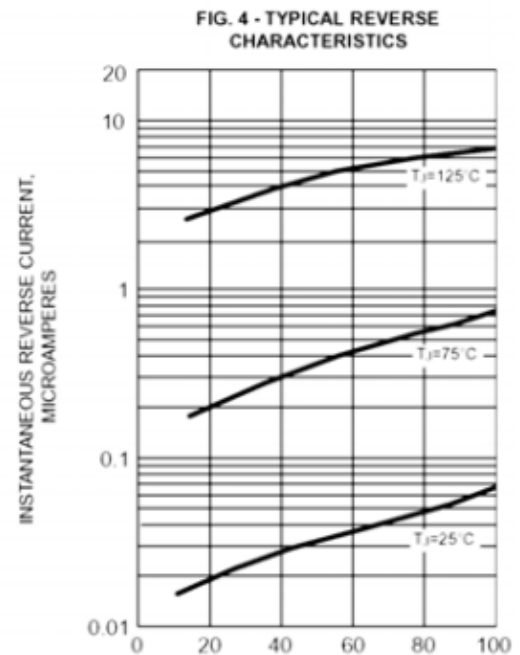
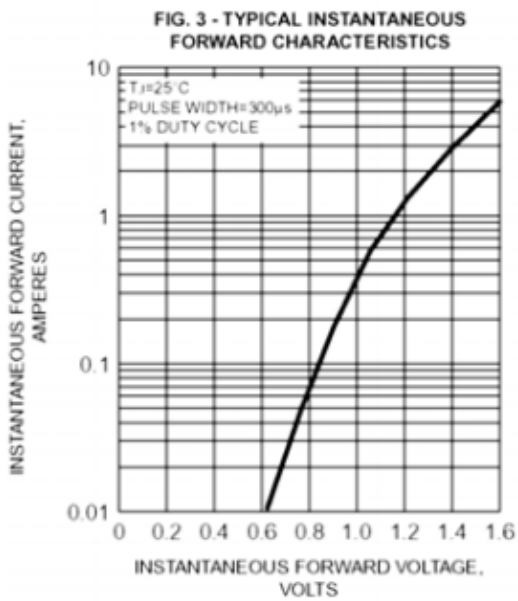
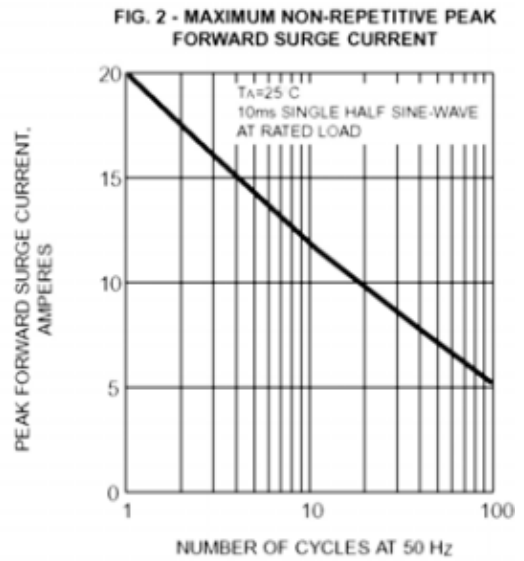
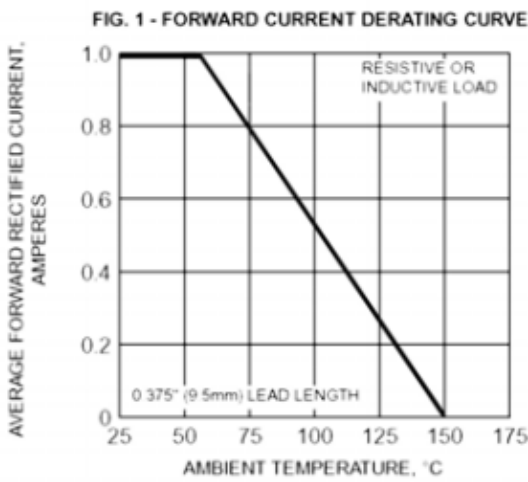
3. Measured at 1 MHz and Applied Reverse Voltage of 4.0 V D.C



Ordering information (Example)

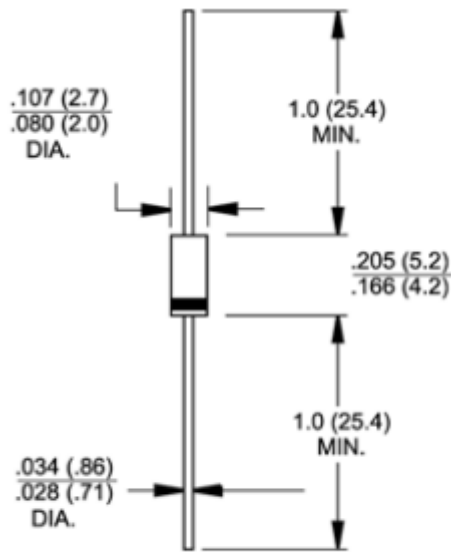
PREFERRED	UNIT WEIGHT (g)	PREFERRED PACKAGE CODE	BASE QUANTITY	DELIVERY MODE
BA159G				

Typical characteristics





Package outline dimensions



Dimensions in inches and (millimeters)

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