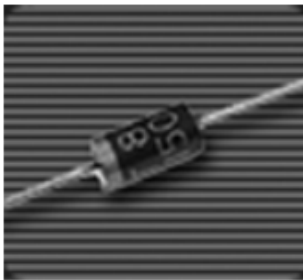


Glass Passivated Fast Recovery Rectifier
DO-15(DO-204AC)

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

$I_{F(AV)}$	2A
V_{RRM}	50V to 1000V
I_{FSM}	55A
I_{RM}	5 μ A
V_{FM} at $I_F=2$ 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-15(DO-204AC)
- 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-15(DO-204AC)							Unit
		FR 201G	FR 202G	FR 203G	FR 204G	FR 205G	FR 206G	FR 207G	
Max. repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Max. RMS reverse 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 current	$I_{F(AV)}$	2							A
Non-repetitive peak forward surge current 8.3ms single half-sine-wave	I_{FSM}	55							A
Max. instantaneous forward voltage drop per diode	V_{FM}	1.3 (2A)							V
Max. instantaneous reverse current at rated DC blocking voltage	I_{RM}	5							μ A
		100							
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 junction capacitance (Note 2)	C_J	25							pF

Notes:

1 Reverse Recovery Test Conditions: $I_F=0.5A$, $I_R=1.0A$, $I_{RR}=0.25$

2.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
FR207G				

Typical characteristics

FIG.3- TYPICAL FORWARD CHARACTERISTICS

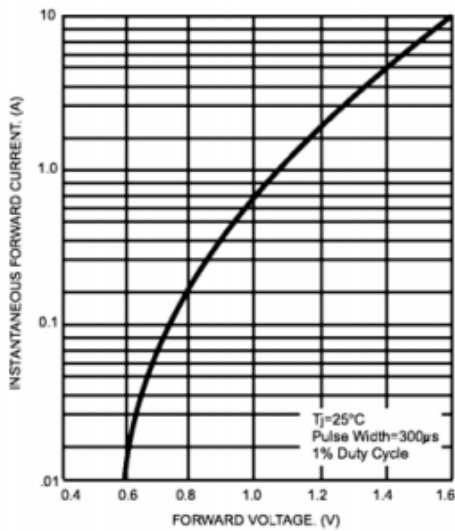


FIG.2- TYPICAL JUNCTION CAPACITANCE

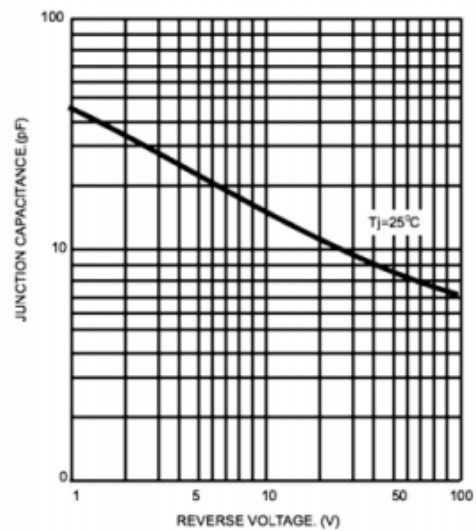


FIG.5- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

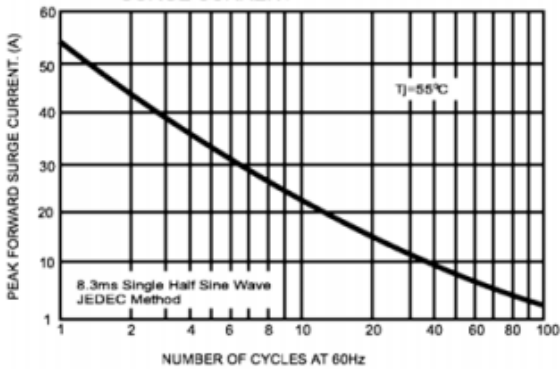
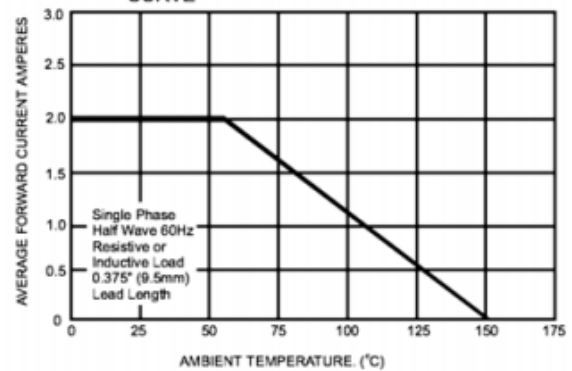
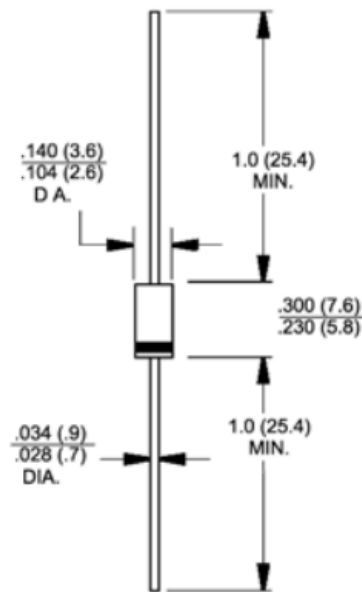


FIG.4- MAXIMUM FORWARD CURRENT DERATING CURVE



Package outline dimensions



Dimensions in inches and (millimeters)

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