

Glass Passivated Super Fast Rectifiers
DO-204AC(DO-15)

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 600V
I_{FSM}	35A
I_{RM}	5 μ A
V_{FM} at $I_F=1A$	1.25
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-204AC(DO-15)
- 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-204AC(DO-15)		Unit
		MUR140	MUR160	
Max. repetitive peak reverse voltage	V_{RRM}	400	600	V
Max. RMS reverse voltage	V_{RMS}	400	600	V
Max. DC blocking voltage	V_{DC}	400	600	V
Max. average forward current	$I_{F(AV)}$	1		A
Non-repetitive peak forward surge current 8.3ms single half-sine-wave	I_{FSM}	35		A
Max. instantaneous forward voltage drop per diode	V_{FM}	1.25		V
Max. instantaneous reverse current at rated DC blocking voltage	I_{RM}	Ta=25 °C	5	μ A
		Ta=125 °C	150	
Operating junction temperature	T_J	-55 ~ +150		°C
Storage temperature	T_{STG}	-55 ~ +150		°C
Maximum reverse recovery time (Note1)	t_{rr}	50		nS
Typical thermal resistance (Note2)	R_{J-A}	50		°C/W

Notes:

1 Reverse Recovery Test Conditions: $I_F=0.5A$, $I_R=1.0A$, $IRR=0.25A$

2 Lead length = 3/8" on P.C. Board with 1.5" x 1.5" copper surface



Ordering information (Example)

PREFERRED	UNIT WEIGHT (g)	PREFERRED PACKAGE CODE	BASE QUANTITY	DELIVERY MODE
MUR140				

Typical characteristics

Fig. 1 – Forward Current Derating Curve

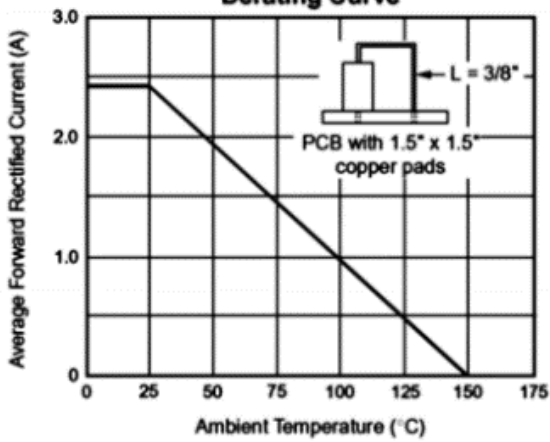


Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current

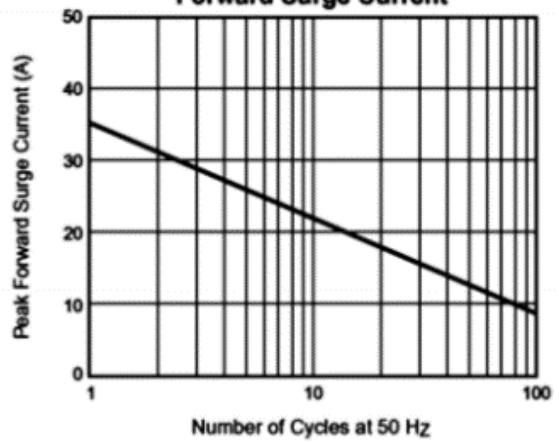


Fig. 3 – Typical Instantaneous Forward Characteristics (MUR160)

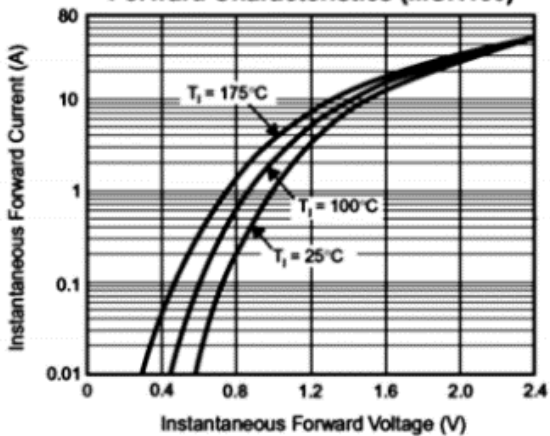
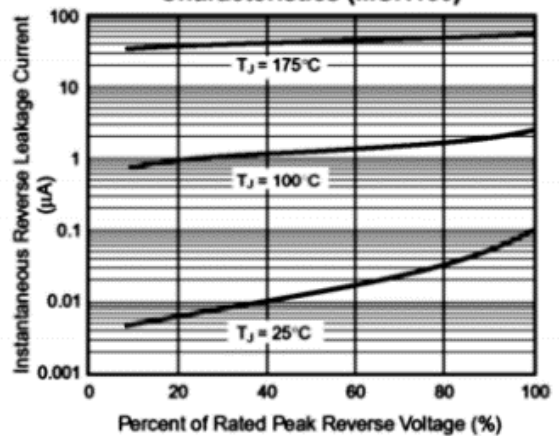
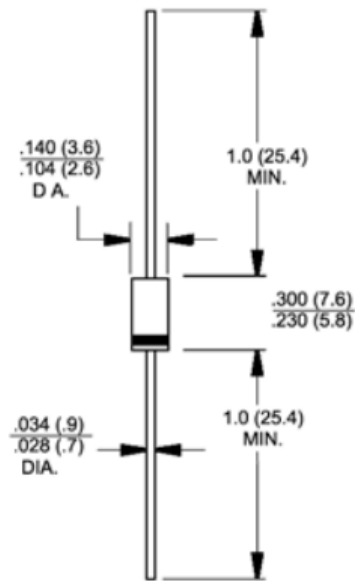


Fig. 4 – Typical Reverse Leakage Characteristics (MUR160)



Package outline dimensions



Dimensions in inches and (millimeters)

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