

R-6 Axial General Purpose Rectifier

Features

- I_O 10A
- V_{RRM} 50V-1000V
- High current capability
- High reliability
- High surge current capability

Applications

For use in general purpose rectification of power supplies, inverters, converters, and freewheeling diodes for consumer and telecommunication

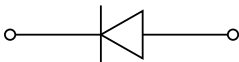
Mechanical Data

- Case: R-6
Molding compound meets UL 94V-0 flammability rating
- Terminals: Solder plated, solderable per MIL-STD-202, Method 208 guaranteed
- Polarity: Cathode line denotes the cathode end

Function Diagram

Reverse Voltage
50-1000 V
Forward Current
10 Ampere

R-6



Maximum Ratings (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	10A05	10A1	10A2	10A4	10A6	10A8	10A10
Device marking code			10A05	10A1	10A2	10A4	10A6	10A8	10A10
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	V	50	100	200	400	600	800	1000
Maximum Average Forward Rectified Current @ 60Hz sinewave, Resistance load	I _{F(AV)}	A	10						
Non-repetitive Peak Forward Surge Current @ t=8.3ms Half-sine wave	I _{FSM}	A	400						
Storage temperature	T _{stg}	°C	-55 ~ +150						
Junction temperature	T _j	°C	-55 ~ +150						
Typical Thermal Resistance	R _{θJ-A}	°C /W	10						
	R _{θJ-L}	°C /W	2.5						

Electrical Characteristics (Ta=25°C Unless otherwise noted)

PARAMETER	TEST CONDITIONS	SYMBOL	UNIT	10A05	10A1	10A2	10A4	10A6	10A8	10A10
Maximum instantaneous forward voltage	I _F =10A	V _F	V	1.1						
Maximum DC reverse current at rated DC blocking voltage	V _R =V _{RRM} , T _A =25°C	I _{R1}	μA	5						
	V _R =V _{RRM} , T _A =125°C	I _{R2}		50						

10A05 THRU 10A10

AXIAL GENERAL PURPOSE RECTIFIER

● Ratings And Characteristics Curves (Ta=25°C Unless otherwise specified)

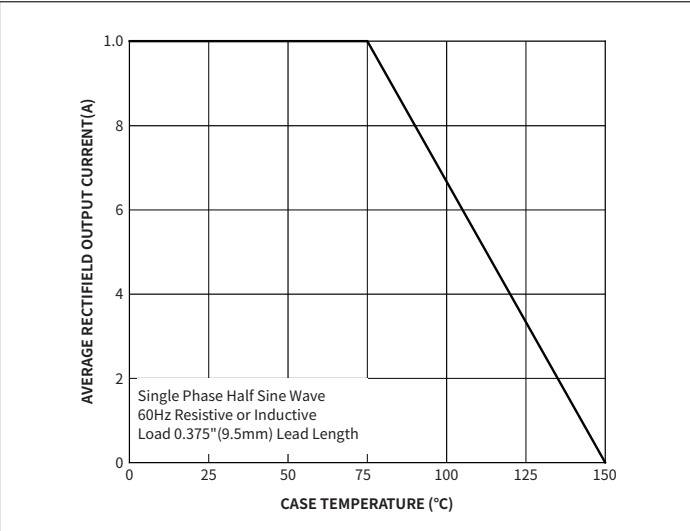


Fig.1 Forward Current Derating Curve

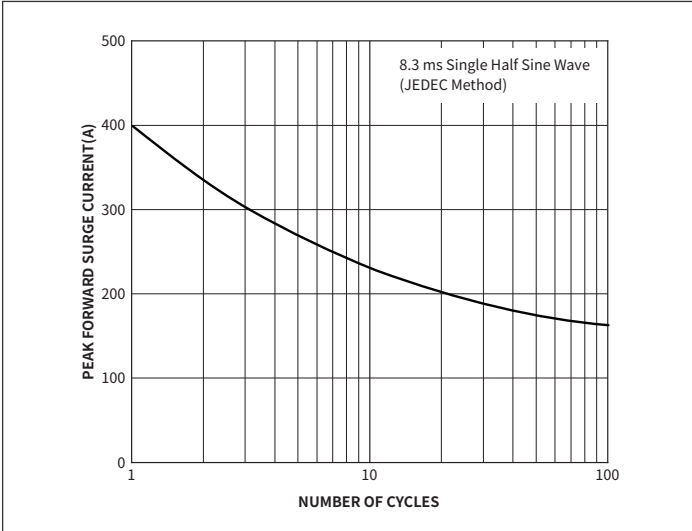


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

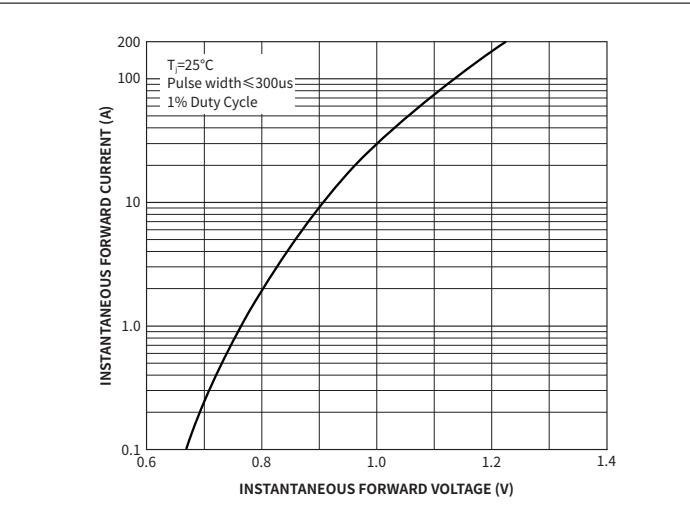


Fig.3 Typical Forward Voltage

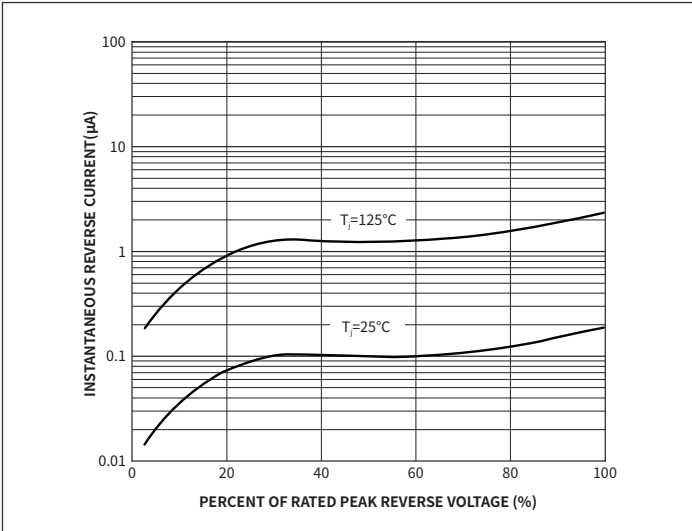


Fig.4 Typical Reverse Characteristics

10A05 THRU 10A10

AXIAL GENERAL PURPOSE RECTIFIER

● Ordering Information

PACKAGE	UNIT WEIGHT(g)	BOX(pcs)	CARTON(pcs)
R-6	2.1	500	5000

● Package Outline Dimensions (R-6)

Symbol	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	8.6	9.1	0.34	0.36
C	1.0	1.3	0.039	0.052
D	8.6	9.1	0.34	0.36
L	24.5	-	0.96	-

The diagram shows a side view of the R-6 package. Dimension A is the width of the top flange. Dimension C is the width of the bottom flange. Dimension D is the height of the main body. Dimension L is the total height from the bottom of the bottom flange to the top of the top flange.