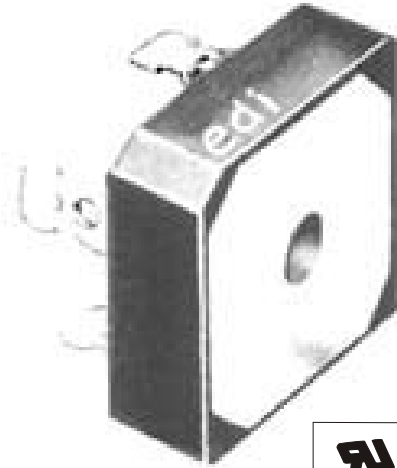




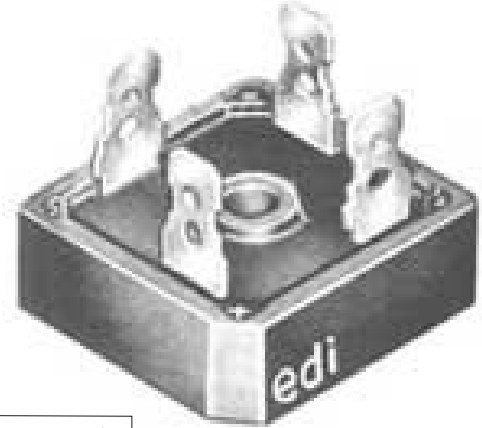
# FPIR32 MPIR40 KPIR50

## MINIBRIDGE<sup>®</sup>

FAST RECOVERY, 32, 40 and 50 AMPERES



INTEGRALLY MOLDED  
HEAT SINKS  
PROVIDE VERY LOW  
THERMAL RESISTANCE



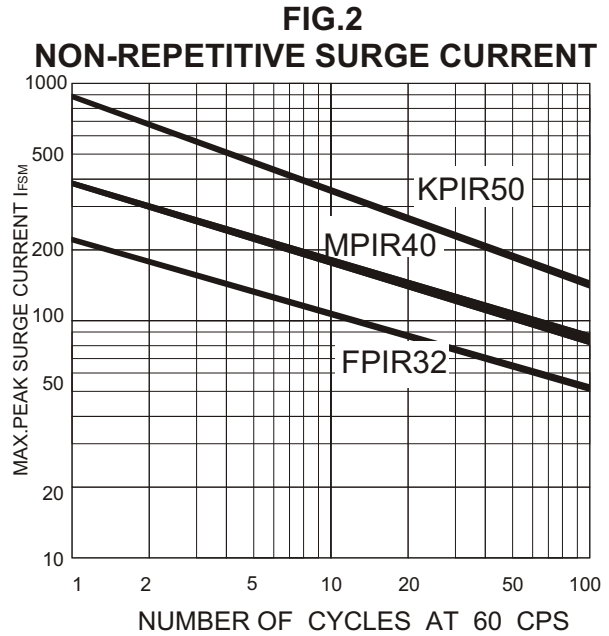
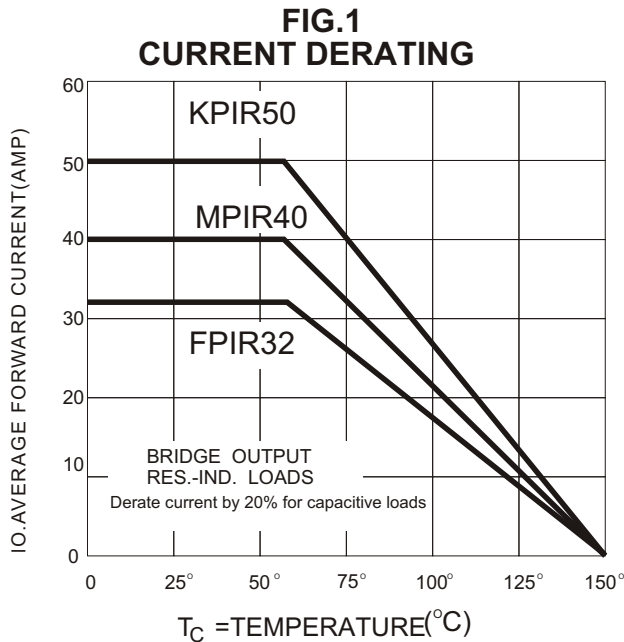
This mark indicates recognition under the component program of Underwriters Laboratories, inc.

Our unique case construction enables the closer molding of integrated heat sink to the active components for a superior thermal transfer and lower junction temperatures.

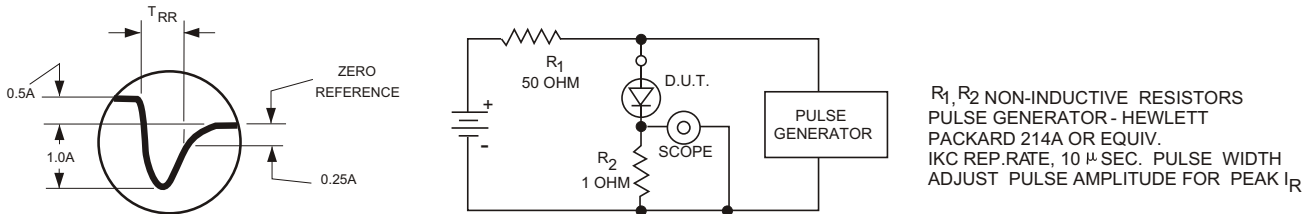
SERIES	50V	100V	200V	400V	600V	800V	1000V
FPIR SERIES	FPIR 3205	FPIR 3210	FPIR 3220	FPIR 3240	FPIR 3260	FPIR 3280	FPIR 32100
MPIR SERIES	MPIR 4005	MPIR 4010	MPIR 4020	MPIR 4040	MPIR 4060	MPIR 4080	MPIR 40100
KPIR SERIES	KPIR 5005	KPIR 5010	KPIR 5020	KPIR 5040	KPIR 5060	KPIR 5080	KPIR 50100

ELECTRICAL CHARACTERISTICS PER LEG (at T <sub>A</sub> =25 °C Unless Otherwise Specified)	SERIES			UNITS
	FPIR 32	MPIR 40	KPIR 50	
Average Output Current, I <sub>o</sub> @ T <sub>c</sub> (Fig.1)	32	40	50	Amp
Max.Forward Voltage Drop, V <sub>F</sub> @ I <sub>F</sub> =12A (300 μsec pulse)	1.4	1.4	1.4	Volts
Max.DC Reverse Current @ PRV and 25 °C, I <sub>R</sub>	10	10	15	μA
Max.DC Reverse Current @ PRV and 100°C, I <sub>R</sub>	100	100	150	μA
Max.Peak Surge Current, I <sub>FSM</sub> (8.3ms) (Fig.2)	240	320	900	Amp
Max. Reverse Recovery Time, T <sub>rr</sub> (Fig.3)	250	250	250	ns.
Storage Temperature Range, T <sub>STG</sub>	-55 to+150			°C
Ambient Operating Temperature Range, T <sub>A</sub>	-55 to+150			°C
Thermal Resistance (Total Bridge), Rθ <sub>j-c</sub>	1.5 typ.	1.2 typ.	0.8 typ.	°C/W

# FPIR32 MPIR40 KPIR50

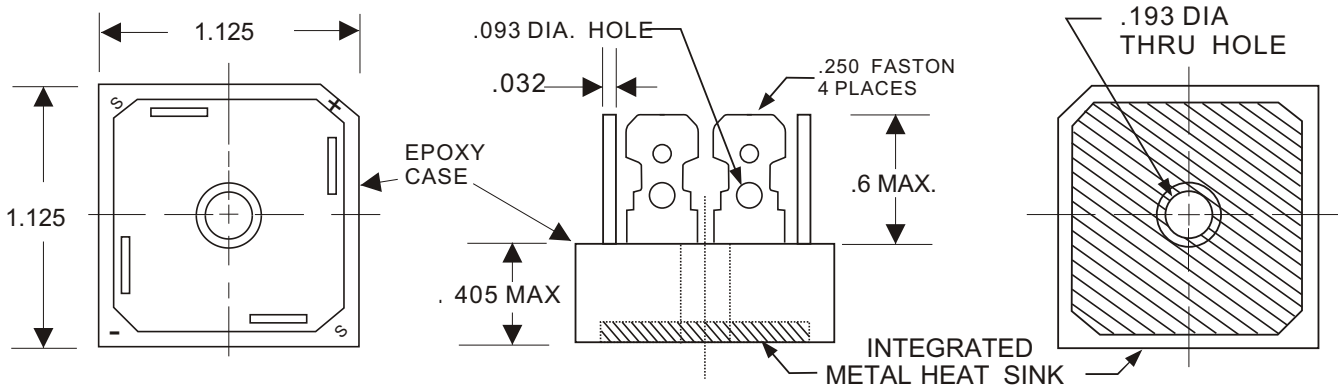


**FIG. 3 REVERSE RECOVERY TEST METHOD**



## MPIR40 and FPIR32 MECHANICAL OUTLINE

Dielectric test voltage 2500 volts rms, max. 50-60Hz



1. Corrosion resistant terminals designed for .250 female quick connector, wraparound or solder.
2. A thin film of silicone thermal compound is recommended between the Minibridge® case and mounting surface for improved thermal conduction.
3. Higher dielectric strengths available. Consult factory.

NOTE Maximum lead and terminal temperature for soldering, 3/8 inch from case, 5 seconds at 250 °C