



MPZ5024 THRU MPZ5040

50A, 20-24V, 28-32V, 38-42V
AVALANCHE PRESS-FIT MOTOROLA DIODES

FEATURES

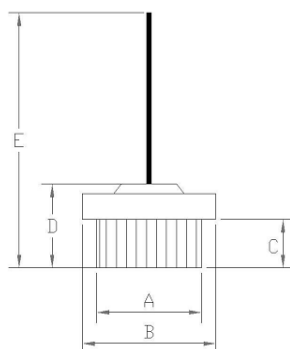
- .High current capability
- .Low forward voltage drop
- .Low leakage current
- .High surge current capability

MECHANICAL DATA

Case: Copper NP

Terminals: Plated terminals, solderable per
MIL-STD-202, method 208.

.Weight: 6.8grams



A=∅12.75±0.45mm B=∅15.8±0.2mm
C=5.6±0.1mm D=9.75±0.15mm
E=30.0mm max

Dimension in millimeters

P CASE

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C Ambient temp. Unless otherwise specified. Single phase, half sine wave, 60HZ, resistive or inductive load.

For capacitive load, derate current by 20%

	SYMBOL	MPZ5024	MPZ5028	MPZ5040	UNITS
Maximum Current Peak Reverse Voltage	VRRM	16	20	34	Volts
Working Peak Reverse Voltage	VRWM	16	20	34	Volts
Maximum DC Blocking Voltage	VDC	16	20	34	Volts
Breakdown voltage Min@ IBR=100mA/TA=25°C	VBRL	20	24	38	Volts
Breakdown voltage Max@ IBR=100mA/TA=25°C	VBRH	24	32	42	Volts
TL=125°C Maximum Average Forward Rectified Current	I(AV)	50			Amps
Peak Forward Surge Current 8.3ms Single Sine-wave on Rated Load (JEDEC Method)	IFSM	500			Amps
Maximum Instantaneous Forward Voltage Drop at 35A DC	VF	1.0			Volts
TA=25°C Maximum DC Reverse Current at Rated DC Blocking Voltage	IR	0.2			uA
IF=10mA Forward Voltage Temperature Coefficient	VFTS	2			mV/°C
Operating AND Storage Temperature Range	TSTG/ TJ	-55 to +150			°C

NOTE: 1. Measured at 1 MHz and Applied Reverse Voltage of 4.0 Volts D.C.

RATING AND CHARACTERISTIC CURVES MPZ5024 THRU MPZ5040

FIG. 1 – MAXIMUM AVERAGE FORWARD CURRENT DERATING

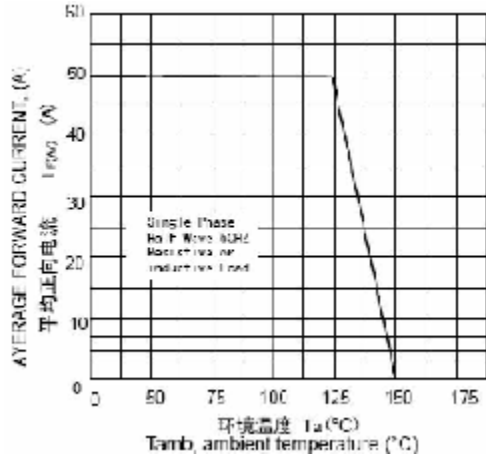


FIG. 2 – MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

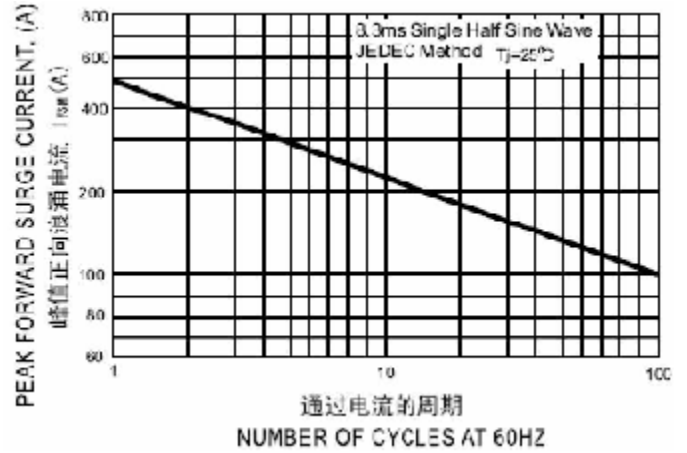


FIG. 3 – PULSE WAVEFORM

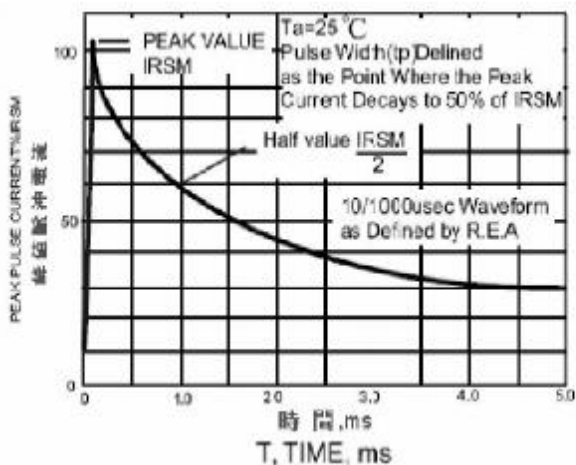


FIG.4 – TYPICAL FORWARD CHARACTERISTICS

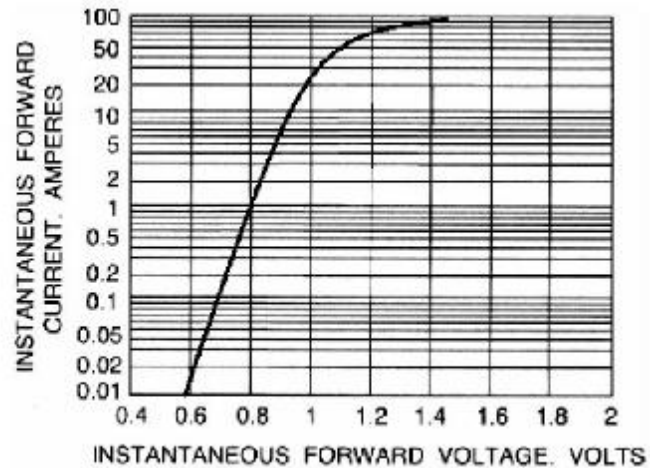


FIG.5 – PULSE RATING CURVE

