



CHENMKO ENTERPRISE CO.,LTD

Lead free devices

SURFACE MOUNT

SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE 35 - 80 Volts CURRENT 10 Amperes

MPL1035PT

THRU

MPL1080PT

PROVISIONAL SPEC.

APPLICATION

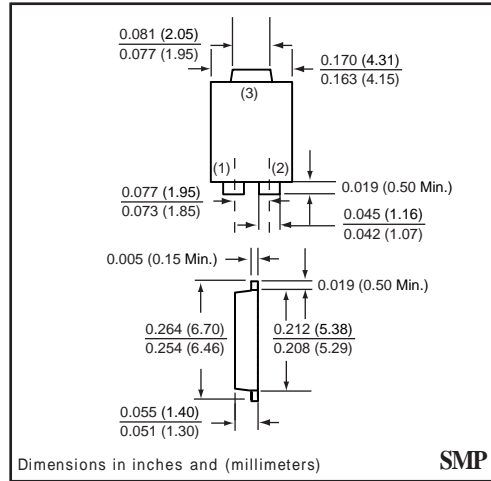
- * DC to DC Converters
- * Switch- Mode Power Supplies
- * Notebook PC

FEATURE

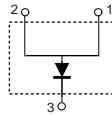
- * Small Surface Mounting Type. (SMP)
- * Low Power Loss, High Efficiency .
- * Low Forward Voltage Drop .
- * Peak Forward Surge Current Is 100A.
- * Schottky Diode Array .

WEIGHT

MARKING



CIRCUIT



MAXIMUM RATINGS (At TA = 25°C unless otherwise noted)

RATINGS	SYMBOL	MPL1035PT	MPL1045PT	MPL1060PT	MPL1080PT	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	35	45	60	80	Volts
Maximum RMS Voltage	VRMS	25	31	42	56	Volts
Maximum DC Blocking Voltage	VDC	35	45	60	80	Volts
Maximum Average Forward Rectified Current	Io	10				Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	100				Amps
Typical Junction Capacitance (Note 2)	CJ	500				pF
Typical Thermal Resistance (Note 3)	R θJL	15				°C / W
Operating Temperature Range	TJ	-65 to +125				°C
Storage Temperature Range	TSTG	-65 to +150				°C

ELECTRICAL CHARACTERISTICS (At TA = 25°C unless otherwise noted)

CHARACTERISTICS	SYMBOL	MPL1035PT	MPL1045PT	MPL1060PT	MPL1080PT	UNITS
Maximum Instantaneous Forward Voltage at 10 A DC (Note 1)	VF	0.60	0.60	0.80	0.80	Volts
Maximum Average Reverse Current (Note 1) at Rated DC Blocking Voltage	@ TJ = 25°C	10				uAmps
	@ Tc = 125°C	15				mAmps

- NOTES : 1. Pulse test : 300 us pulse width, 1% duty cycle
 2. Measured at 1.0 MHz and applied reverse voltage of 4.0 volts
 3. P.C.B. mounted 0.31 x 0.31" (8 x 8mm) copper pad areas

RATING CHARACTERISTIC CURVES (MPL1035PT THRU MPL1080PT)

FIG. 1 - FORWARD CHARACTERISTICS

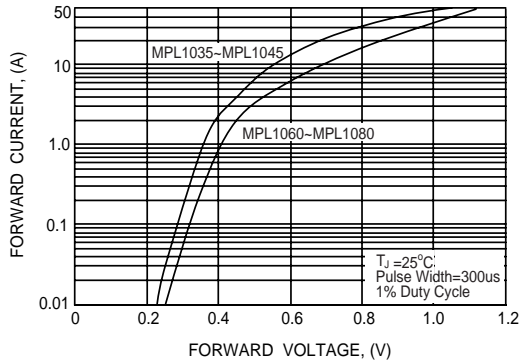


FIG. 2 - REVERSE CHARACTERISTICS

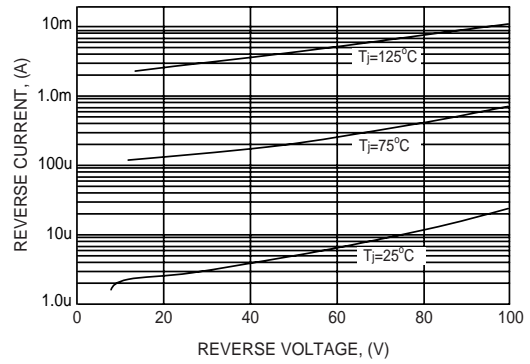


FIG. 3 - TYPICAL JUNCTION CAPACITANCE

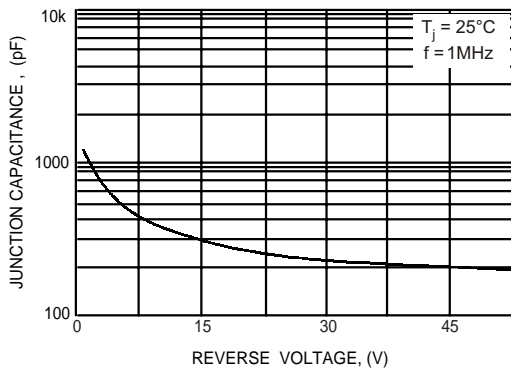


FIG. 4 - TYPICAL FORWARD CURRENT DERATING CURVE

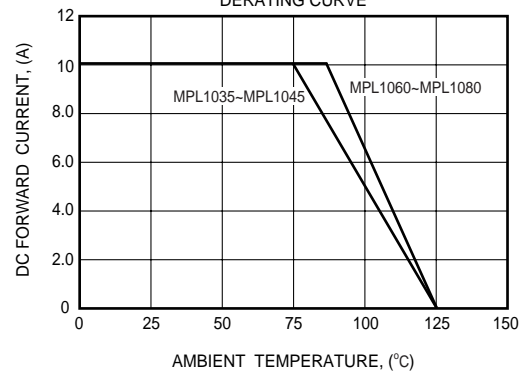


FIG. 5 - MAX. NON-REPETITIVE PEAK FORWARD SURGE CURRENT

