CHENMKO ENTERPRISE CO.,LTD

SURFACE MOUNT

SCHOTTKY DIODE ARRAY

VOLTAGE 60 Volts CURRENT 8 Amperes

MPL860PT

Lead free devices

PROVISIONAL SPEC.

APPLICATION

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

FEATURE

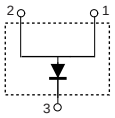
* Small Surface Mounting Type. (SMP)
* High speed (T_{RR}=8.0nSec TYP.)
* Low Power Loss, High Efficiency .
* Low Forward Voltage Drop .
* Peak Forward Surge Current Is 100A.
* Schottky Diode Array .

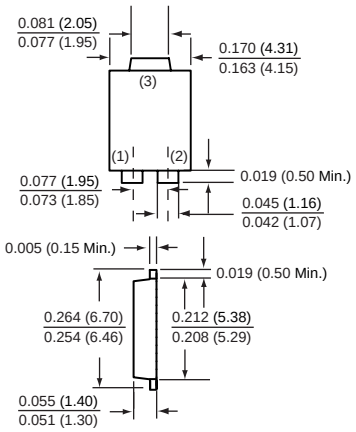
WEIGHT

MARKING

SMP

CIRCUIT





Dimensions in inches and (millimeters)

SMP

RATINGS	SYMBOL	MPL860PT	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	60	Volts
Maximum RMS Voltage	V_{RMS}	42	Volts
Maximum DC Blocking Voltage	V_{DC}	60	Volts
Maximum Average Forward Rectified Current	I_O	8	Amps
Non-Repetitive Peak Forward Surge Current at 8.3 mSec.	I_{FSM}	100	Amps
Total Capacitance (f=1.0MHZ , V_R =4.0VDC)	C_T	400	pF
Typical Thermal Resistance	$R\theta_{J-S}$	3.2	$^oC/W$
Maximum Operating Temperature Range	T_J	-55 to +125	^oC
Storage Temperature Range	T_{STG}	-55 to +150	^oC

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

CHARACTERISTICS		SYMBOL	MPL860PT	UNITS
Typ. Forward Voltage	@I_F= 8A , T_S=25 ^{o}C	V_F	0.70	Volts
Maximum Reverse Current	@V_R= 60V , T_S=25°C	I_R	10	uAmps

2004-8

RATING CHARACTERISTIC CURVES (MPL860PT)

FIG. 1 - FORWARD CHARACTERISTICS

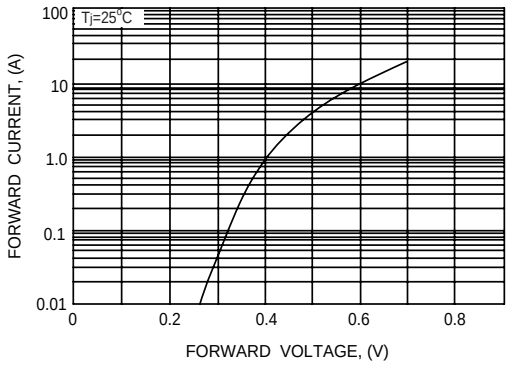


FIG. 2 - REVERSE CHARACTERISTICS

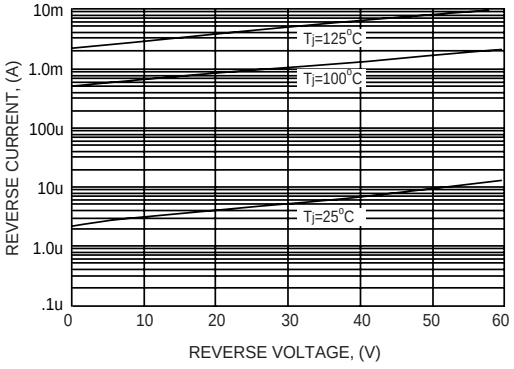


FIG. 3 - TYPICAL JUNCTION CAPACITANCE

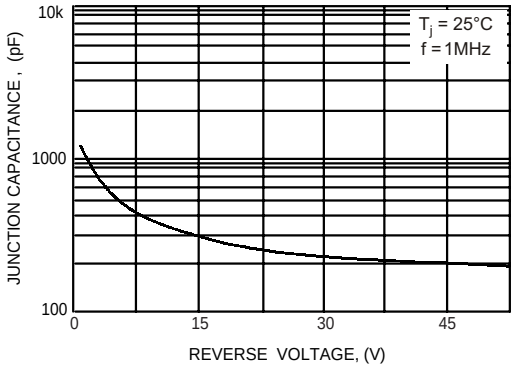


FIG. 4 - TYPIAL FORWARD CURRENT DERATING CURVE

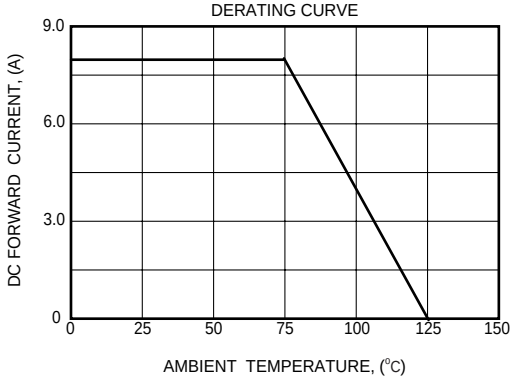


FIG. 5 - MAX. NON-REPETITIVE PEAK FORWARD SURGE CURRENT

