

POWER SCHOTTKY RECTIFIERS
30A Av, Up to 45V

USD3030C
USD3040C
USD3045C

- Economical Convenient TO-3P Package
- Insulated Mounting Hole
- Can Be Clip Mounted
- Mechanically Rugged
- Low Thermal Resistance
- Extremely Low V_F

DESCRIPTION
The USD3030C Series, in the economical, convenient TO-3P package, is specifically designed for operation in power switching circuits to frequencies in excess of 100kHz. The very low forward voltage and low recovered charge translates to extremely high efficiency making them particularly suited for low voltage switching type power supplies.

Table with 4 columns: Parameter, USD3030C, USD3040C, USD3045C. Rows include Absolute Maximum Ratings (Working Peak Inverse Voltage, D.C. Blocking Voltage, Peak Repetitive Surge Voltage, Maximum Average D.C. Output Current, etc.) and Thermal Resistance values.

ELECTRICAL SPECIFICATIONS

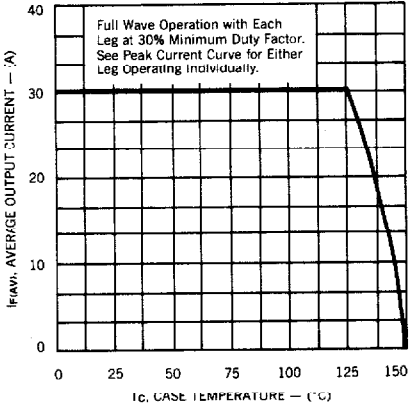
Table with 8 columns: Type, V_{RRM}, Maximum Forward Voltage (V_F) at T_J = 25°C and T_J = 125°C, Maximum Reverse Current (I_R) at V_{RRM} and T_J = 125°C, Maximum Capacitance C_T at V_R = 5.0V, Voltage Rate of Change (dv/dt).

MECHANICAL SPECIFICATIONS

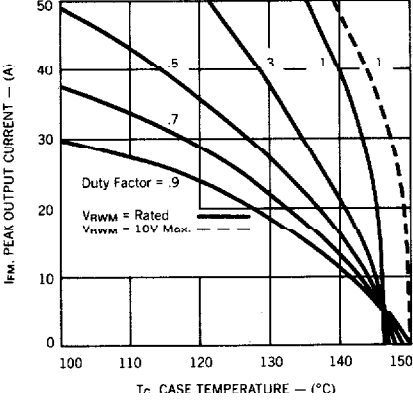
Technical drawing of the TO-3P package showing dimensions (A, B, C, D, E, F, G, H, J, K, L, M, N) and a table of dimensions in inches (MIN, MAX).

Microsemi Corp.
Watertown
The diode experts

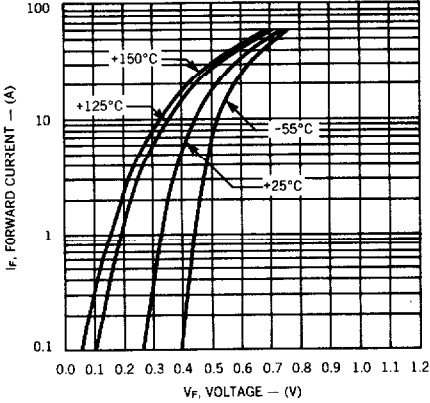
Average Output Current
vs Case Temperature



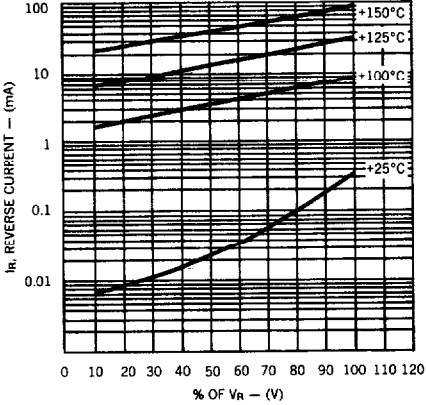
Peak Output Current vs Case Temperature
(Either Leg)



Typical Forward Current vs Forward Voltage



Typical Reverse Current vs Voltage



Thermal Impedance vs Pulse Width
(Each Leg)

