PPC INC.
Microsemi
7516 Central Industrial Drive
Riviera Beach, FL 33404
PH: 561-842-0305
Fax: 561-845-7813

1N6845

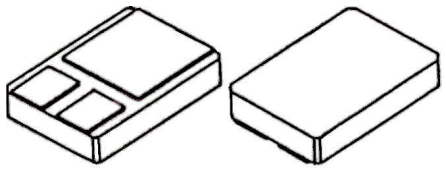
45 VOLTS, 40 AMP
SCHOTTKY RECTIFIER
CERAMIC SURFACE MOUNT

DESIGNER'S DATA SHEET

FEATURES:

- **Low Profile Ceramic SMD**
- **High Surge Rating**
- **Low Reverse Leakage Current**
- **Low Forward Voltage**
- **Seam Welded Package**
- **Low Capacitance**
- **Ultrasonic Aluminum Wire Bonds**

SMD-0.5



MAXIMUM RATINGS

RATING	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse and DC Blocking Voltage **1N6845**	V_{RRM} V_{RWN} V_R	**45**	**Volts**
Average Rectified Forward Current (Resistive Load, 60Hz, Sine Wave, TA = 25°C)	**Io**	**40**	**Amps**
Peak Surge Current 8.3 ms Pulse, TA = 25°C	I_{FSM}	**400**	**Amps**
Operating & Storage Temperature	**Top & Tstg**	**-55 to +150**	**°C**
Maximum Thermal Resistance Junction to Case,	$R_{\theta JC}$	**2.0**	**°C /W**

1/4/00

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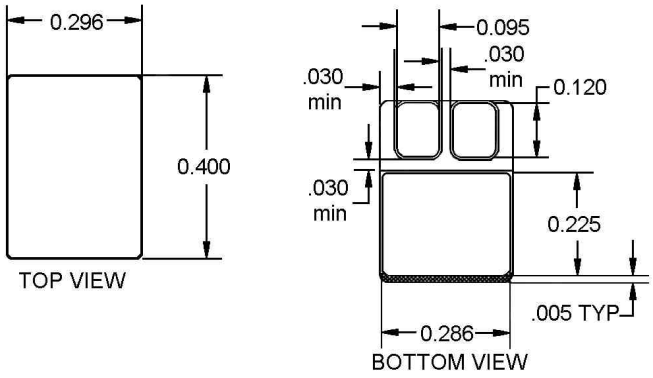
ELECTRICAL CHARACTERISTICS

CHARACTERISTICS	SYMBOL	MAX.	UNIT
Instantaneous Forward Voltage Drop (I_F = 10 Adc, T_A = 25•C, 300us Pulse (I_F = 20 Adc, T_A = 25 °C, 300µs Pulse) (I_F = 40 Adc, T_A = 25 °C, 300µs Pulse)	V_F	**0.65** **0.72** **0.86**	**Vdc**
Instantaneous Forward Voltage Drop (I_F = 20 Adc, T_A = 100 °C, 300µs Pulse) (I_F = 20 Adc, T_A = -55 °C, 300µs Pulse)	V_F	**0.65** **0.78**	**Vdc**
Reverse Leakage Current (Rated VR, T_A = 25°C, 300µs pulse minimum)	I_R	**100**	**µA**
Reverse Leakage Current (Rated VR, T_A = 100 °C, 300µs pulse minimum)	I_R	**10**	**mA**
Junction Capacitance V_R = 10Vdc, T_A = 25 °C, f = 1 MHz)	C_J	**800**	**Pf**

CASE OUTLINE: SMD-0.5



TYPICAL OPERATING CURVES

(TA=25°C Unless otherwise specified)