

## American Microsemiconductor Inc.

133 Kings Road, Madison, NJ 07940 http://www.americanmicrosemiconductor.com

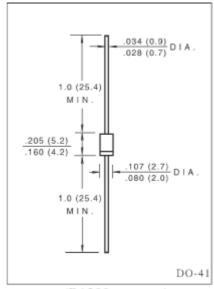
# HIGH VOLTAGE SILICON RECTIFIER

### FEATURES

- · Low leakage
- · High surge capability
- · High current capability
- High temperature soldering guaranteed: 260°C/10 seconds. 0.375" (9.5mm) lead length at 5lbs. (2.3kg) tension.

#### MECHANICAL DATA

- · Case: Transfer molded plastic
- · Epoxy: UL94V 0 rate flame retardant
- · Polarity: Color band denotes cathode end.
- Lead: Plated slug, solderable per MIL STD 202 E method 208C
- · Mounting position: Any
- Weight: 0.012 ounce, 0.33grams (DO-41)
  0.014 ounce, 0.39 grams (DO-15)



(R1200 - R2000)

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

- Ratings at 25°C ambient temperature unless otherwise specified
- · Single phase, half wave, 60Hz, resistive or inductive load.
- · For capacitive load derate current by 20%

	SYMBOLS	R1200	R1500	R1800	R2000	R2500	R3000	R4000	R5000	UNIT
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	1200	1500	1800	200	2500	3000	4000	5000	Volts
Maximum RMS Voltage	$V_{RMS}$	840	1050	1260	1400	1750	2100	2800	3500	Volts
Maximum DC Blocking Voltage	V <sub>DC</sub>	1200	1500	1800	2000	2500	3000	4000	5000	Volts
Maximum Average Forward Rectified Current, 0.375" (9.5mm) Lead length at $T_A = 50^{\circ}C$	$I_{(AV)}$	500 200					mA			
Peak Forward Surge Current 8.3ms single half sine - wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	30						Amps		
Maximum Instantaneous Forward Voltage Drop at 0.5A / 0.2A	V <sub>F</sub>	2.0			3	.0	4.0	5.	.0	Volts
Maximum DC Reverse Current at rated T <sub>A</sub> = 25°	C T	I <sub>R</sub> 5.0								
DC blocking voltage $T_C = 100$	°C IR	40								
Maximum Full Load Reverse Current, full cycle										$\mu$ A
average 0.375" (9.5mm) lead length	$I_{R(AV)}$	30								
at $T_L = 75^{\circ}C$										
Operating and Storage Temperature Range	$T_J, T_{STG}$	(-65 to +150)				$^{\circ}\!\mathbb{C}$				