

HIGH VOLTAGE SILICON RECTIFIER

VOLTAGE RANGE 1200 to 2000 Volts CURRENT 0.2 to 0.5 Ampere

FEATURES

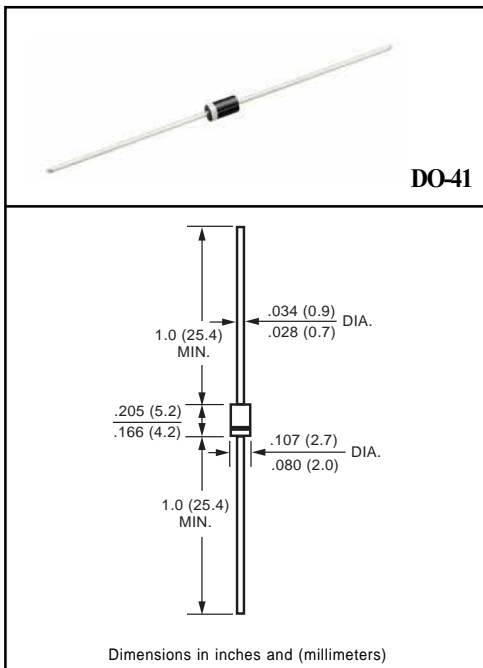
- * Low cost
- * Low leakage
- * Low forward voltage drop
- * High current capability

MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: Device has UL flammability classification 94V-0
- * Lead: MIL-STD-202E method 208C guaranteed
- * Mounting position: Any
- * Weight: 0.35 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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



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

RATINGS		SYMBOL	R1200	R1500	R1800	R2000	UNITS
Maximum Recurrent Peak Reverse Voltage		V _{RRM}	1200	1500	1800	2000	Volts
Maximum RMS Volts		V _{RMS}	840	1050	1260	1400	Volts
Maximum DC Blocking Voltage		V _{DC}	1200	1500	1800	2000	Volts
Maximum Average Forward Rectified Current at TA = 50°C		I _O	500			200	mAmps
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)		I _{FSM}	30				Amps
Typical Junction Capacitance (Note)		C _J	30				pF
Operating and Storage Temperature Range		T _J , T _{STG}	-55 to +150				°C

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

CHARACTERISTICS		SYMBOL	R1200	R1500	R1800	R2000	UNITS
Maximum Instantaneous Forward Voltage at 0.5A/0.2A DC		V _F	2.0			3.0	Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	@ TA = 25°C	I _R	5.0				uAmps
	@ TA = 100°C		50				
Maximum Full Load Reverse Current Average, Full Cycle .375", (9.5mm) lead length at TL = 75°C				30			uAmps

NOTES : Measured at 1 MHz and applied reverse voltage of 4.0 volts.

RATING AND CHARACTERISTIC CURVES (R1200 THRU R2000)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

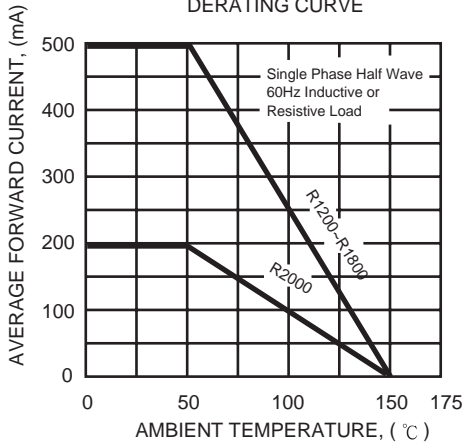


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

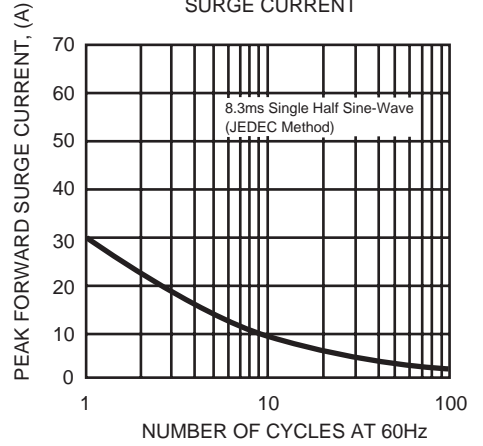


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

