

# EM1 ~ EM1A

**PRV : 400 ~ 600 Volts**

**Io : 1.0 Ampere**

## FEATURES :

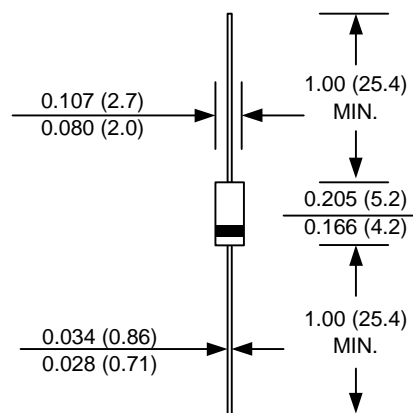
- \* High current capability
- \* High surge current capability
- \* High reliability
- \* Low reverse current
- \* Low forward voltage drop
- \* **Pb / RoHS Free**

## MECHANICAL DATA :

- \* Case : DO-41 Molded plastic
- \* Epoxy : UL94V-O rate flame retardant
- \* Lead : Axial lead solderable per MIL-STD-202, Method 208 guaranteed
- \* Polarity : Color band denotes cathode end
- \* Mounting position : Any
- \* Weight : 0.339 gram

## SILICON RECTIFIER DIODES

### DO - 41



**Dimensions in inches and ( millimeters )**

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.

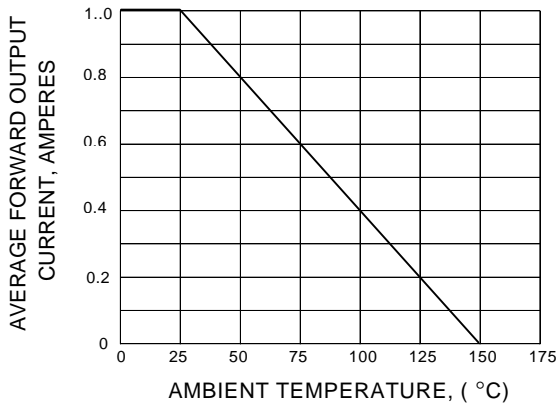
Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

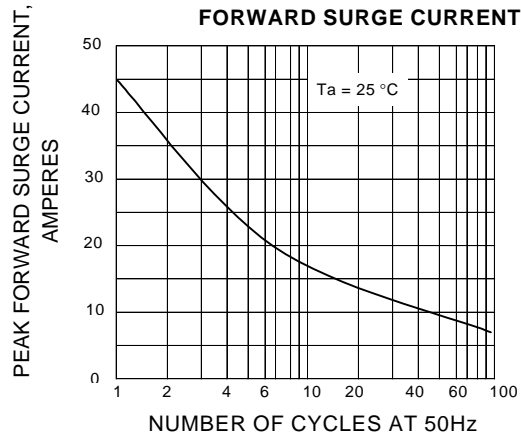
RATING	SYMBOL	EM1	EM1A	UNIT
Maximum Peak Reverse Voltage	V <sub>RM</sub>	400	600	V
Maximum Peak Reverse Surge Voltage	V <sub>RSM</sub>	450	650	V
Maximum Reverse Voltage	V <sub>R</sub>	400	600	V
Maximum Average Forward Current	I <sub>F(AV)</sub>	1.0		A
Maximum Peak Forward Surge Current (50 Hz, Half-cycle, Sine Wave, Single Shot)	I <sub>FSM</sub>	45		A
Maximum Forward Voltage at I <sub>F</sub> = 1.0 A	V <sub>F</sub>	0.97		V
Maximum Reverse Current at Reverse Voltage Ta = 25 °C	I <sub>R</sub>	10		μA
Maximum Reverse Current at Reverse Voltage Ta = 100 °C	I <sub>R(H)</sub>	50		μA
Junction Temperature Range	T <sub>J</sub>	- 40 to + 150		°C
Storage Temperature Range	T <sub>STG</sub>	- 40 to + 150		°C

**RATING AND CHARACTERISTIC CURVES ( EM1 ~ EM1A )**

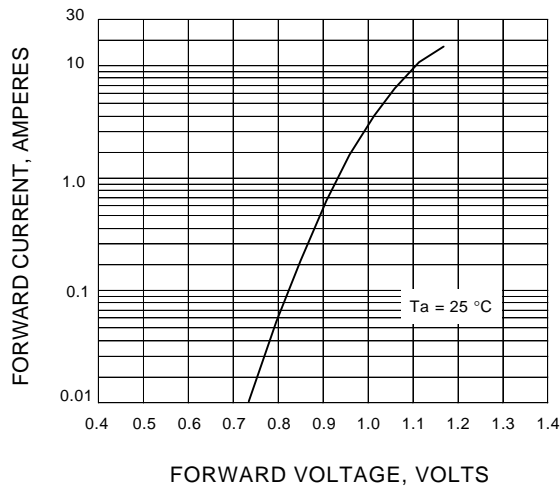
**FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT**



**FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**



**FIG.3 - TYPICAL FORWARD CHARACTERISTICS**



**FIG.4 - TYPICAL REVERSE CHARACTERISTICS**

