

EM01 - EM01Z

PRV : 200 - 600 Volts

Io : 1.0 Ampere

FEATURES :

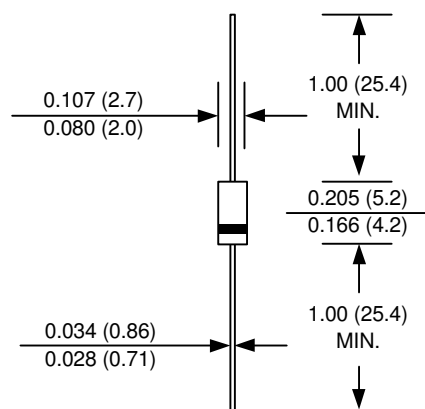
- * High current capability
- * High surge current capability
- * High reliability
- * Low reverse current
- * Low forward voltage drop
- * **Pb / RoHS Free**

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

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	EM01Z	EM01	EM01A	UNIT
Maximum Peak Reverse Voltage	V_{RM}	200	400	600	V
Maximum Peak Reverse Surge Voltage	V_{RSM}	250	450	650	V
Maximum Reverse Voltage	V_R	200	400	600	V
Maximum Average Forward Current	$I_{F(AV)}$	1.0			A
Maximum Peak Forward Surge Current (50 Hz, Half-cycle, Sine Wave, Single Shot)	I_{FSM}	45			A
Maximum Forward Voltage at 1.0 A	V_F	0.97			V
Maximum Reverse Current at $V_R = V_{RM}$ $T_a = 25\text{ }^{\circ}\text{C}$	I_R	10			μA
Maximum Reverse Current at $V_R = V_{RM}$ $T_a = 100\text{ }^{\circ}\text{C}$	$I_{R(H)}$	50			μA
Junction Temperature Range	T_J	- 40 to + 150			$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	- 40 to + 150			$^{\circ}\text{C}$

RATING AND CHARACTERISTIC CURVES (EM01 - EM01Z)

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

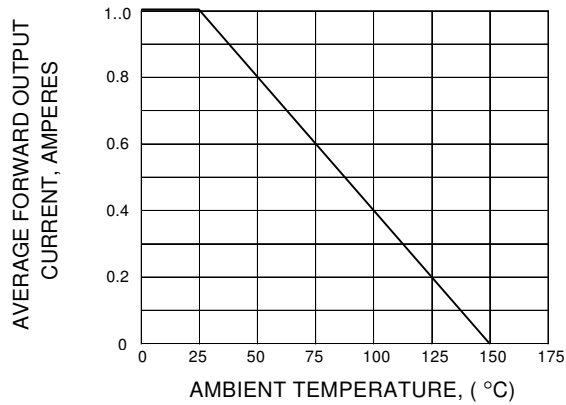


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

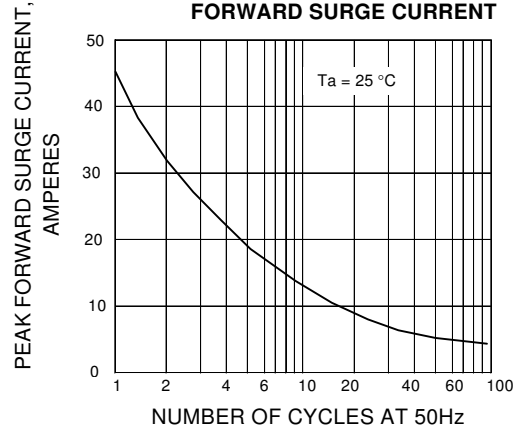


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

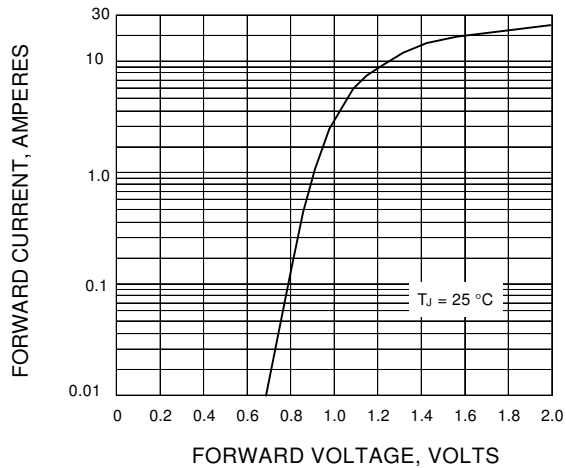


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

