

# 1GH46

# FAST RECOVERY RECTIFIER

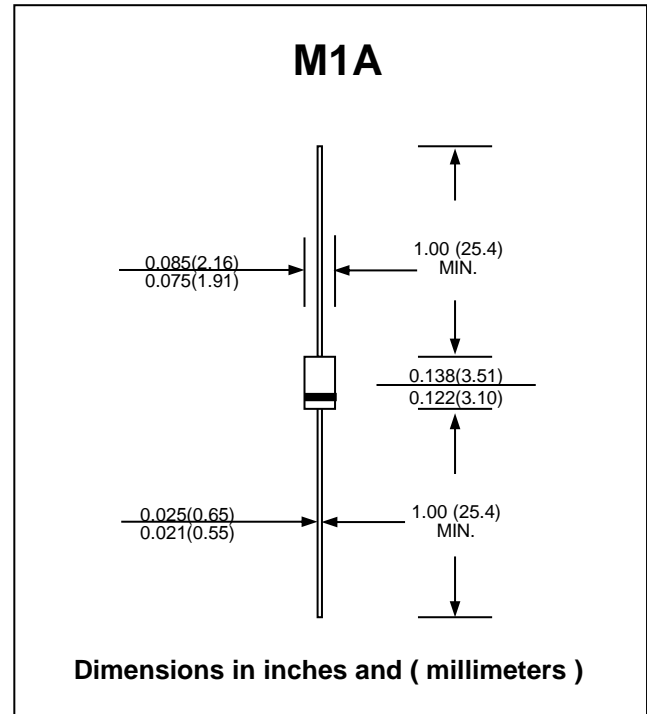
**PRV : 400 Volts**  
**I<sub>o</sub> : 1.0 Ampere**

### FEATURES :

- \* Glass passivated junction chip
- \* High reliability
- \* Low reverse current
- \* Low forward voltage drop
- \* Fast switching for high efficiency
- \* Pb / RoHS Free

### MECHANICAL DATA :

- \* Case : M1A 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 : 0.20 gram (approximately)



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

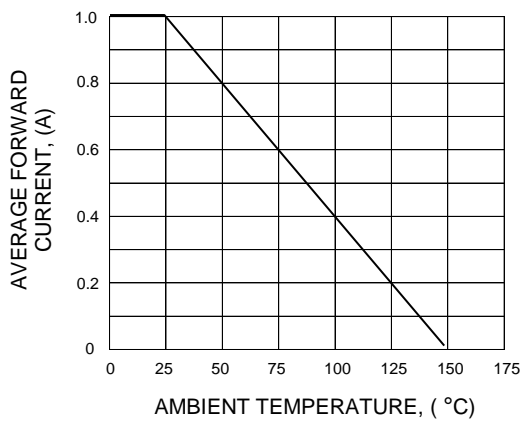
Rating at 25 °C ambient temperature unless otherwise specified.

RATING	SYMBOL	VALUE	UNIT
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	400	V
Maximum Average Forward Current, $T_a = 25\text{ °C}$	$I_{F(AV)}$	1.0	A
Maximum Peak One Cycle Surge Forward Current ( Non-Repetitive )	$I_{FSM}$	15 ( 50Hz )	A
		17 ( 60Hz )	
Maximum Peak Forward Voltage at $I_F = 1.0\text{ A}$	$V_F$	1.1	V
Maximum Repetitive Peak Reverse Current at $V_{RRM} = 400\text{V}$	$I_R$	100	$\mu\text{A}$
Maximum Reverse Recovery Time ( Note 1 )	$T_{rr}$	200	ns
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	115	$^{\circ}\text{C/W}$
Junction Temperature Range	$T_J$	- 40 to + 150	$^{\circ}\text{C}$
Storage Temperature Range	$T_{STG}$	- 40 to + 150	$^{\circ}\text{C}$

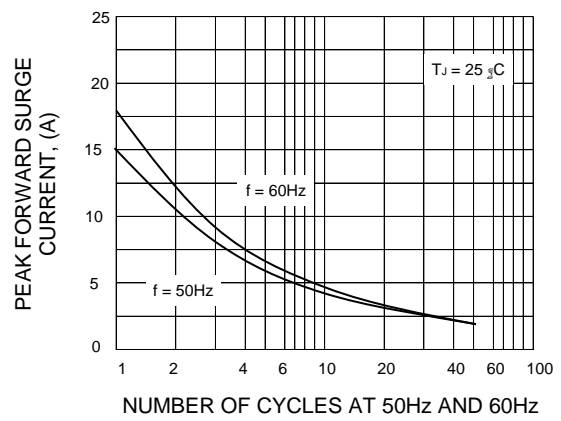
**Note:** (1) Reverse Recovery Test Conditions :  $I_F = 1\text{ A}$ ,  $di/dt = -30\text{ A}/\mu\text{s}$ .

**RATING AND CHARACTERISTIC CURVES ( 1GH46 )**

**FIG.1 - DERATING CURRENT CURVE**



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



**FIG.3 - TYPICAL FORWARD CHARACTERISTICS**

