



**Shanghai Lunsure Electronic  
Technology Co.,LTD**  
**Tel:0086-21-37185008**  
**Fax:0086-21-57152769**

## Features

- Low leakage
- Low forward voltage drop
- High current capability
- High forward surge current capability

## Mechanical Data

- Case: Copper case
- Technology: cell with vacuum soldered
- Polarity: As marked of case bottom
- Lead: Plated lead, solderable per MIL-STD-202E method 208C
- Mounting: Press fit
- Weight: 9.0 grams

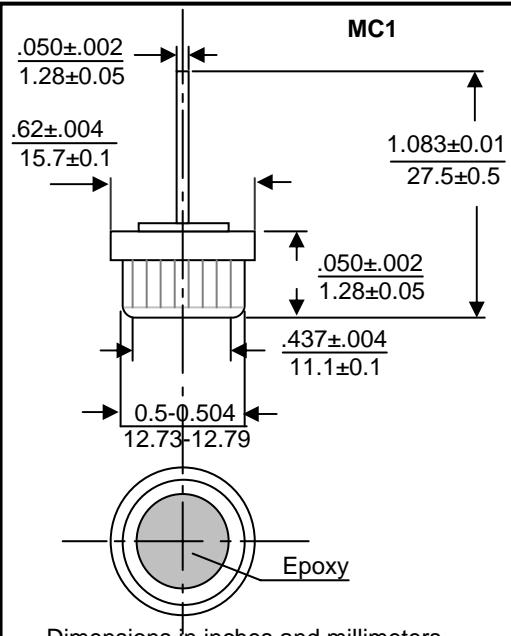
## Maximum Ratings and Electrical Characteristics

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

**AM251  
THRU  
AM256**

## PRESS FIT AUTOMOTIVE RECTIFIER(MOTOROLA)

**VOLTAGE RANGE  
100 TO 600 VOLTS  
CURRENT 25AMPS**



Dimensions in inches and millimeters

Parameters	Symbols	AM251	AM252	AM253	AM254	AM256	Units
Maximum repetitive peak reverse voltage	$V_{RRM}$	100	200	300	400	600	Volts
Maximum RMS voltage	$V_{RMS}$	70	140	210	280	420	Volts
Maximum DC blocking voltage	$V_{DC}$	100	200	300	400	600	Volts
Maximum Average rectified forward current at $T_C=110^\circ C$	$I_o$			25			Amps
Peak forward surge current 8.3mS single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$			400			Amps
Rating for fusing( $t < 8.3\text{ms}$ )	$I^2t$			664			$\text{A}^2\text{s}$
Maximum instantaneous forward voltage drop at 100A	$V_F$			1.08			Volts
Maximum DC reverse current $T_A=25^\circ C$ at rated DC blocking voltage $T_A=150^\circ C$	$I_R$			5.0			$\mu\text{A}$
Typical thermal resistance	$R_{\theta JC}$			450			
Operating and storage temperature	$T_J, T_{STG}$			0.8			$^\circ\text{C}/\text{W}$
				-65 to +175			$^\circ\text{C}$

Notes: 1. Enough heatsink must be considered in application.

## AM251 THRU AM256

### Ratings and Characteristic Curves

FIG.1—TYPICAL FORWARD CURRENT DERATING CURVE

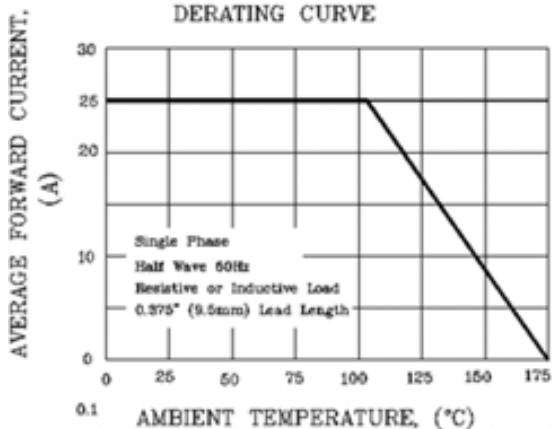


FIG.2—MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

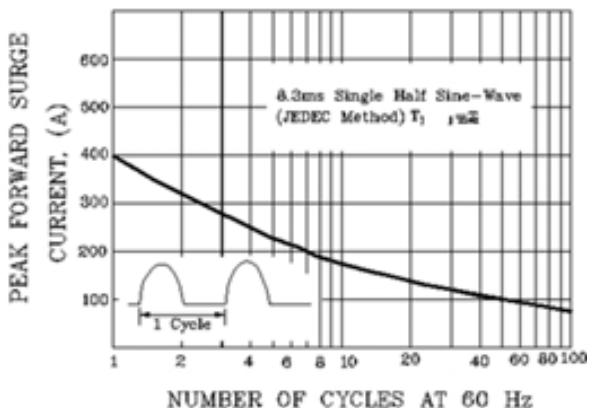


FIG.3—TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

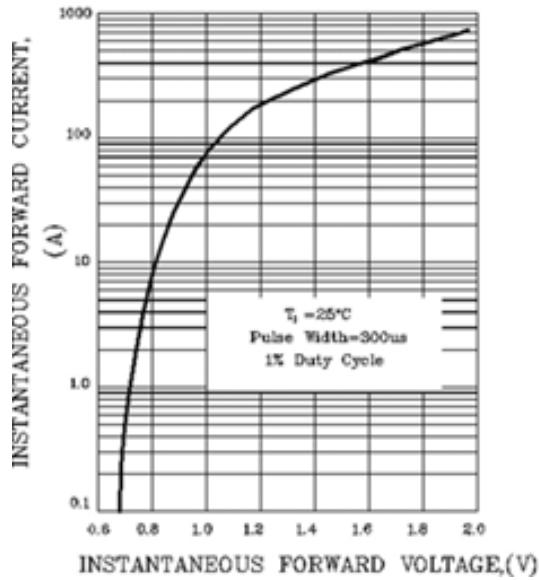


FIG.4—FORWARD POWER DISSIPATION

