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

AM5001 THRU AM5012

HIGH VOLTAGE PRESS FIT DIODE FOR AUTOMOTIVE RECTIFIER(MOTOROLA)

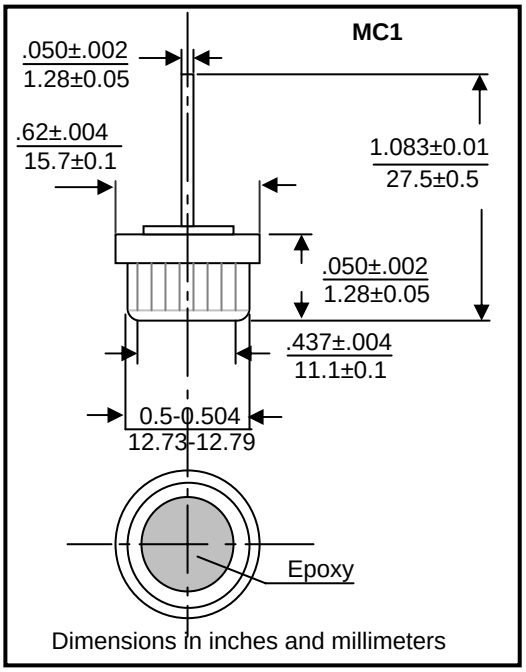
VOLTAGE RANGE
100 TO 1200 VOLTS
CURRENT 50AMPS

Features

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

Mechanical Data

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



Dimensions in inches and millimeters

Maximum Ratings and Electrical Charactristics

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%

Parameters	Symbols	AM5001	AM5002	AM5004	AM5006	AM5008	AM5010	AM5012	Units
Maximum repetitive peak reverse voltage	V_{RRM}	100	200	400	600	800	1000	1200	Volts
Maximum RM S voltage	V_{RMS}	70	140	280	420	560	700	840	Volts
Maximum DC blocking voltage	V_{DC}	100	200	400	600	800	1000	1200	Volts
Maximum Average rectified forward current at T_C=110°C	I_o	50							Amps
Peak forward surge current 8.3mS single half sine-wave superimposed on rated load (JE DEC Method)	I_{FSM}	400							Amps
Rating for fusing(t<8.3ms)	I^2t	664							A^2S
Maximum instantaneous forward voltage drop at 50A	V_F	1.05							Volts
Maximum DC reverse current T_A=25°C at rated DC blocking voltage T_A=150°C	I_R	5.0 500							uA
Typical thermal resistance	$R_{\theta JC}$	1.0							°C/W
Operating and storage temperature	T_J,T_{STG}	-65 to +175							°C

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

AM5001 THRU AM5012

Ratings and Characteristic Curves

FIG.1–TYPICAL FORWARD CURRENT DERATING CURVE

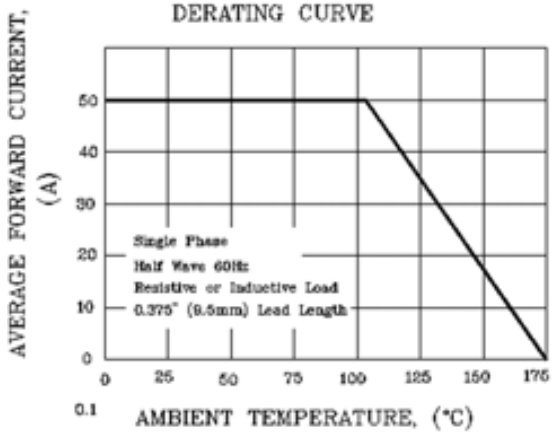


FIG.2–MAXIMUM NON–REPETITIVE PEAK FORWARD SURGE CURRENT

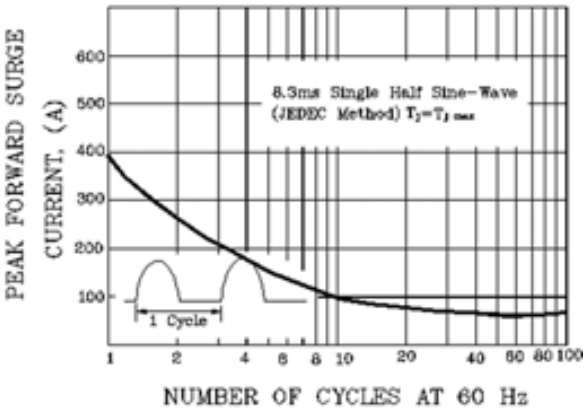


FIG.3–TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

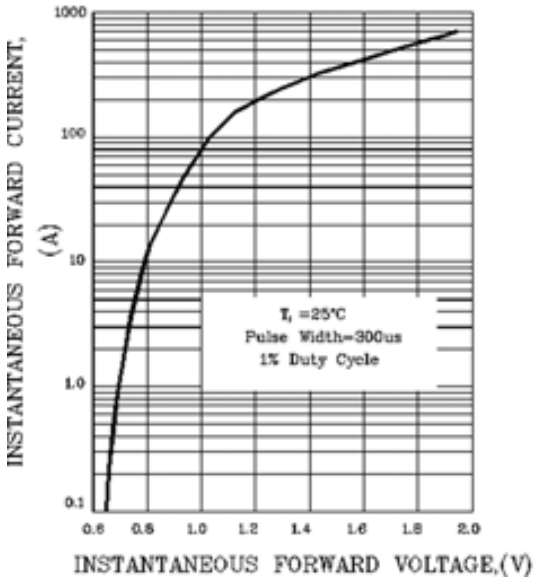


FIG.4– FORWARD POWER DISSIPATION

