M1 THRU M7

1.0AMP SURFACE MOUNT PLASTIC SILICON RECTIFIER

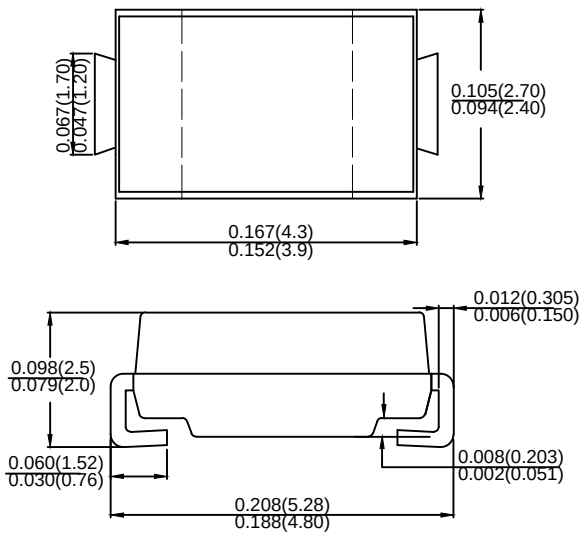
Features

- For surface mounted application
- Low forward voltage drop
- High current capability
- High reliability
- Plastic Case Material has UL Flammability Classification Rating 94V- 0

Mechanical Data

- Case: Molded plastic SMA
- Terminals: Plated leads solderable per MIL-STD-750,Method 2026 guaranteed
- Polarity: Color band dentes cathode end
- Mounting Position: Any
- Making: Type Number

SMA/DO-214AC



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Rating at 25℃ ambient temperature unless otherwise specified

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

For capacitive load derate current by 20%

Type Number	SYMBOL	M1	M2	M3	M4	M5	M6	M7	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Average Rectified Output Current @T_A=50℃	I_O	1.0							A
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30							A
Forward Voltage @IF=1.0A	V_{FM}	1.1							V
Peak Reverse Current @T_A=25℃	I_R	5.0							uA
At Rated DC Blocking Voltage @T_A=100℃		500							
Typical Junction Capacitance (Note 1)	C_J	12							pF
Typical Thermal Resistance Junction to Ambient(Note 2)	$R_{\theta JA}$	30							℃/W
Operating Temperature Range	T_J	-55 to+125							℃
Storage Temperature Range	T_{STG}	-55 to +150							℃

Note:

1. Measured at 1.0 MHz and Applied reverse Voltage of 4.0V D.C
2. Resistance from Junction to Ambient at 0.375(9.5mm) lead length .

FIG.1-TYPICAL FORWARD CURRENT
DERATING CURVE

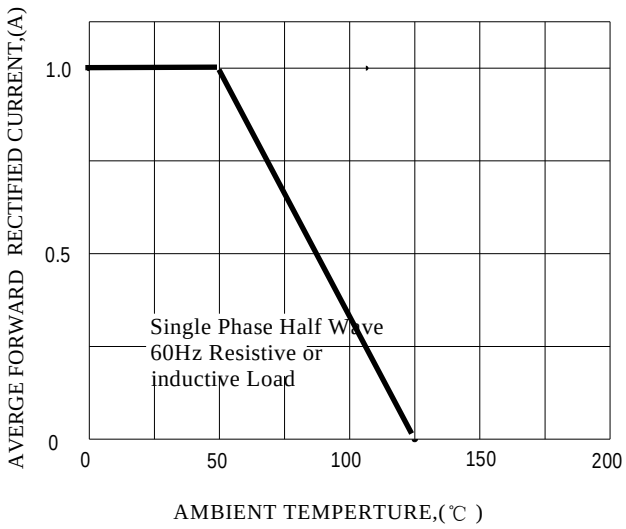


FIG.2-TYPICAL INSTANTANEOUS FORWARD
CHARACTERISTICS

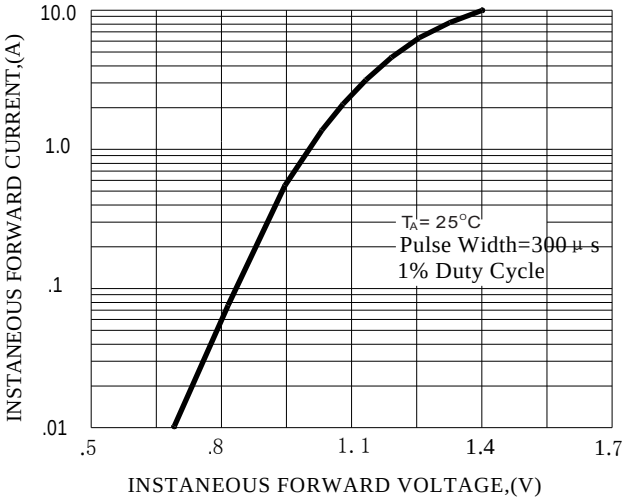


FIG.3-MAXIMUN NON-REPETITIVE
FORWARD SURGE CURRENT

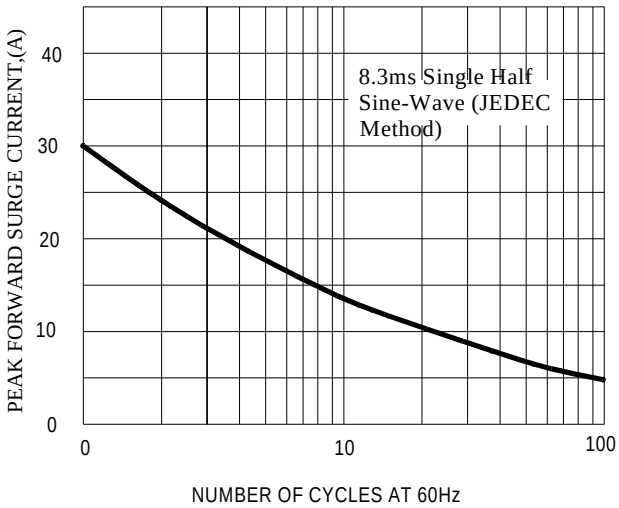


FIG.4-TYPICAL REVERSE
CHARACTERISTICS