

SINGLE-PHASE SURFACE MOUNT RECTIFIER

VOLTAGE RANGE 50 to 1000 Volts
CURRENT 1.0 Ampere

FEATURES

- * Glass Passivated chip junction
- * High forward surge current capability
- * Ideal for printed circuit board
- * High temperature soldering guaranteed:
260°C/10 second at 5 lbs. (2.3kg) tension

MECHANICAL DATA

- * Case: Transfer molded plastic
- * Epoxy: UL94V-O rate flame retardant
- * Terminals : Lead Solderable Per MIL-STD-202 method 208
- * Polarity : As Marking on Body
- * Mounting Position: Any
- * Weight : 0.064 grams (approx.)



* In compliance with EU RoHs 2002/95/EC directives

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 %

Characteristic	Symbol	M1	M2	M3	M4	M5	M6	M7	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	V
Average Rectifier Forward Current (Note 1) @ $T_A=50^\circ C$	$I_{O(AV)}$	1.0							A
Non-Repetitive Peak Surge Current 8.3 ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30							A
Forward Voltage (per element) ($I_F=1.0$ Amp)	V_{FM}	1.10							V
Peak Reverse Current (Rated DC Voltage, $T_C = 25^\circ C$) (Rated DC Voltage, $T_C = 125^\circ C$)	I_R	5.0 200							μA
Typical Junction Capacitance per element (Note2)	C_J	15							pF
Typical Thermal Resistance (Note3)	$R_{\theta JL}$ $R_{\theta JA}$	30.0 90.0							$^\circ C/W$
Operating and Storage Temperature Range	T_J, T_{stg}	-65 to +175							$^\circ C$

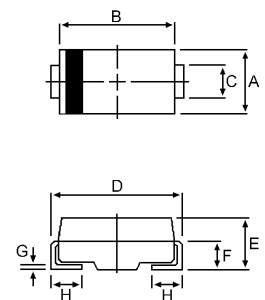
- Note: 1 Lead maintained at ambient temperature at a distance of 9.5 mm from the case.
 2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.
 3. Mounted on P.C. Board with 5.0mm² (.013mm thick) copper pad areas.

SURFACE MOUNT RECTIFIERS

1.0 AMPERES
50-1000 VOLTS



DO-214AC(SMA)



DIM	MILLIMETERS	
	MIN	MAX
A	2.20	2.80
B	4.10	4.70
C	1.30	1.70
D	4.70	5.30
E	1.90	2.50
F		1.30
G		0.30
H	0.90	1.50

CASE---
Transfer molded plastic

POLARITY---
Cathode indicated polarity band

M1 thru M7

FIG-1 FORWARD CURRENT DERATING CURVE

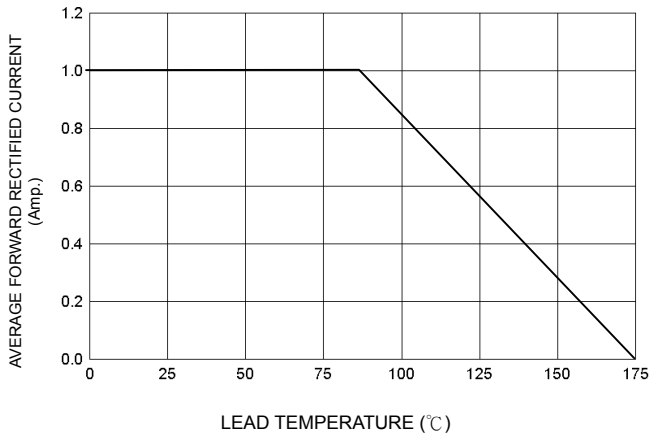


FIG-2 TYPICAL FORWARD CHARACTERISTICS

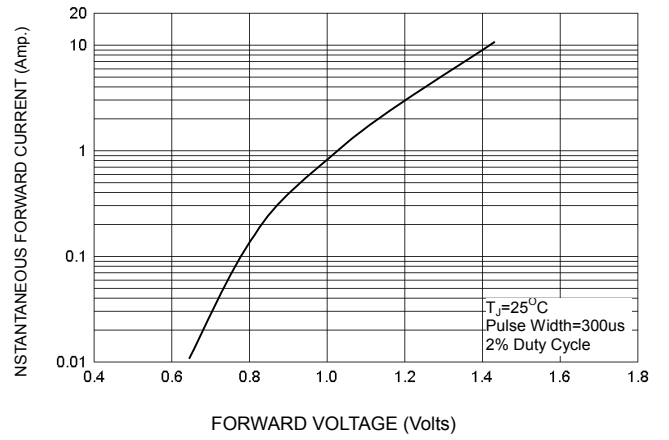


FIG-3 PEAK FORWARD SURGE CURRENT

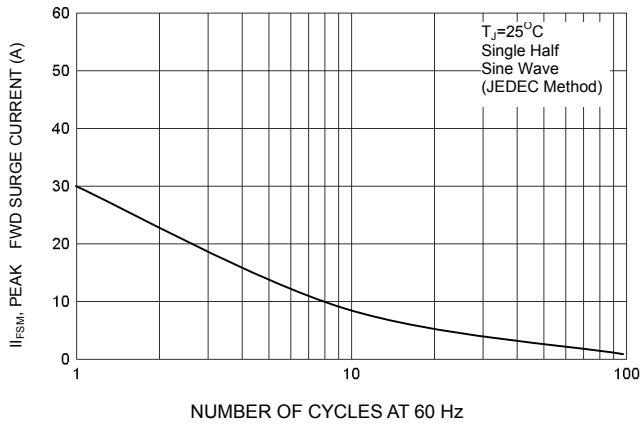


FIG-4 TYPICAL JUNCTION CAPACITANCE

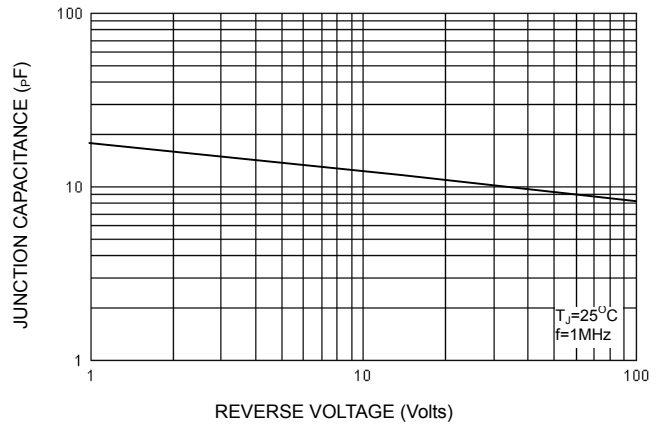


FIG-5 TYPICAL REVERSE CHARACTERISTICS

