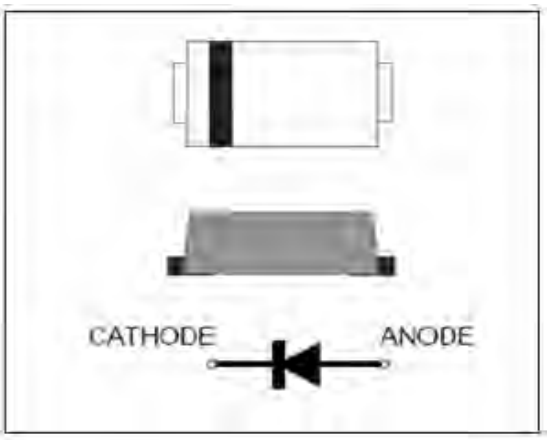
Schottky Barrier Rectifiers
Reverse Voltage 20 to100V Forward Current 3.0A

FEATURES

* Plastic package has Underwriters Laboratory Flammability Classification 94V-0
* Low power loss,high efficiency
* For use in low voltage high frequency inverters, free wheeling,and polarity protection applications
* Guardring for over voltage protection
* High temperature soldering guaranteed: 260°C/10 seconds at terminals

SMA-FL



We declare that the material of product is Haloggen free (green epoxy compound)

Mechanical Data

Case: JEDEC SMA-FL
molded plastic over glass die
Terminals: Plated leads, solderable per MIL-STD-750, Method 2026
Polarity: Color band denotes cathode end
Mounting Position: Any
Weight: 0.0327 g
Handling precautin:None

1.Electrical Characteristic

Maximum& Thermal Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

Parameter Symbol	symbol	SM320 AF	SM330 AF	SM340 AF	SM345 AF	SM350 AF	SM360 AF	SM380 AF	SM3100 AF	Unit
device marking code		S32	S33	S34	S345	S35	S36	S38	S310	
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	45	50	60	80	100	V
Maximum RSM voltage	V_{RSM}	14	21	28	31.5	35	42	56	70	V
Maximum DC blocking voltage	V_{DC}	20	30	40	45	50	60	80	100	V
Maximum average forward rectified current lead length (See fig. 1) at TC = 75°C	IF(AV)	3.0								A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	100								A
Typical thermal resistance (Note 1)	$R\theta J_A$ $R\theta J_C$	150 25								°C/W
Operating junction and storage temperature range	TJ, TSTG	–40 to +150								°C

Electrical Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

Parameter Symbol	symbol	SM320 AF	SM330 AF	SM340 AF	SM345 AF	SM350 AF	SM360 AF	SM380 AF	SM3100 AF	Unit
Maximum instantaneous forward voltage at 3.0A	V_F	0.50				0.70		0.85		V
Maximum DC reverse current TA = 25°C at rated DC blocking voltage TJ = 100°C	IR	0.5 30.0								mA
Typical junction capacitance at 4.0V, 1MHz	CJ	110								PF

NOTES:
1. 8.0mm2 (.013mm thick) land areas

2.Ratings and Characteristic Curves (TA = 25°C unless otherwise noted)

Fig. 1 – Forward Current Derating Curve

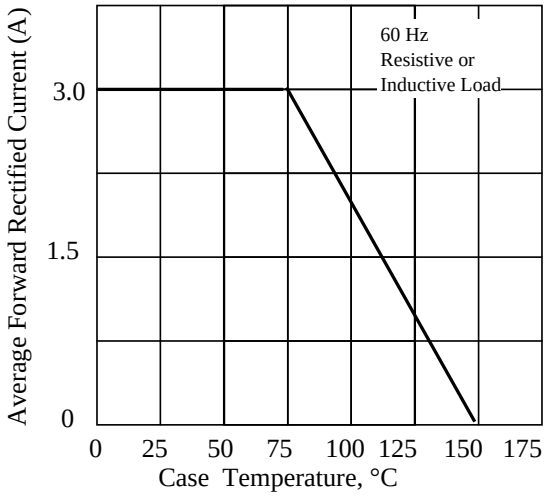


Fig. 2 – Maximum Non-repetitive Peak Forward Surge Current

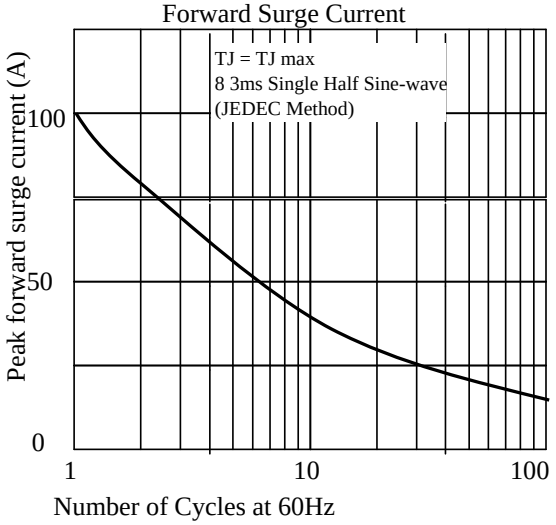


Fig 3. – Typical Instantaneous Forward Characteristics

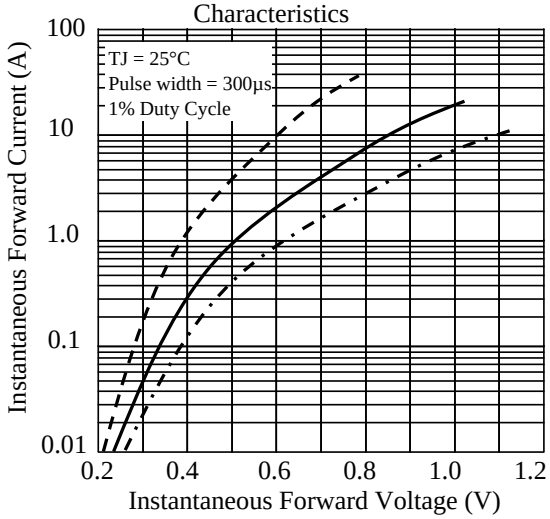


Fig 4. – Typical Reverse Characteristics

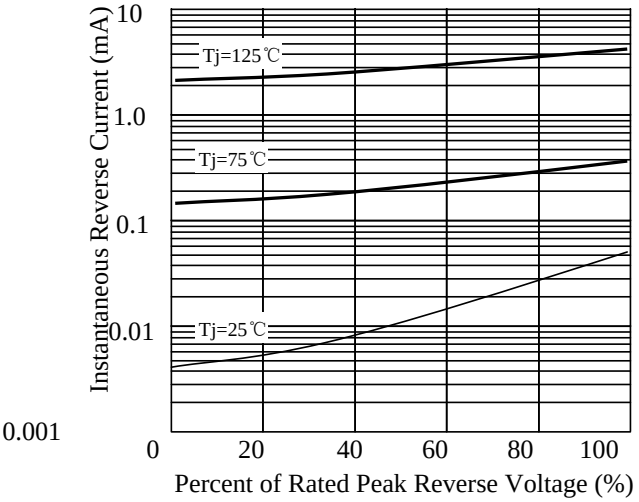


Fig 5. – typical transient thermal impedance

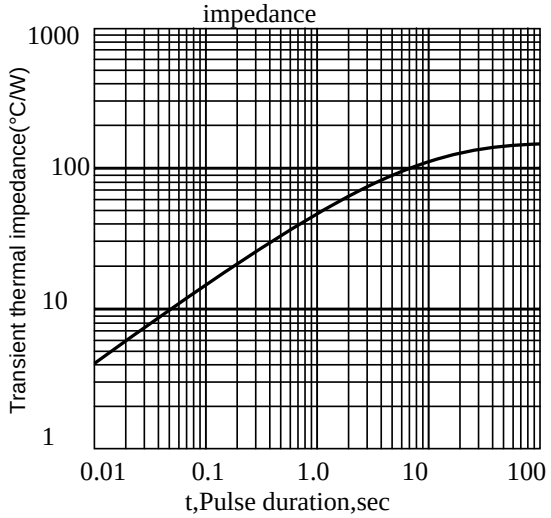
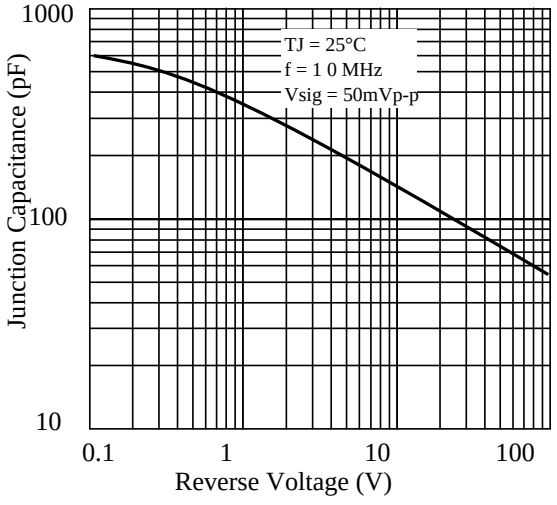
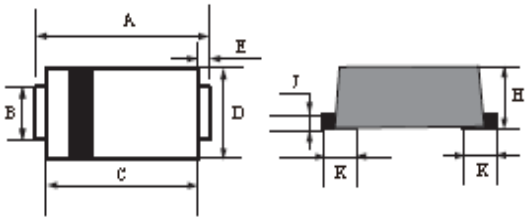


Fig 6. – Typical Junction Capacitance



3. Dimension:

SMA-FL



DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	4.4	4.8	0.173	0.189
B	1.3	1.5	0.051	0.059
C	3.3	3.7	0.130	0.146
D	2.3	2.7	0.091	0.106
E	0.90Typ		0.035Typ	
H	0.9	1.2	0.036	0.047
J	0.11	0.21	0.005	0.009

Mounting Pad Layout

SMA-FL

