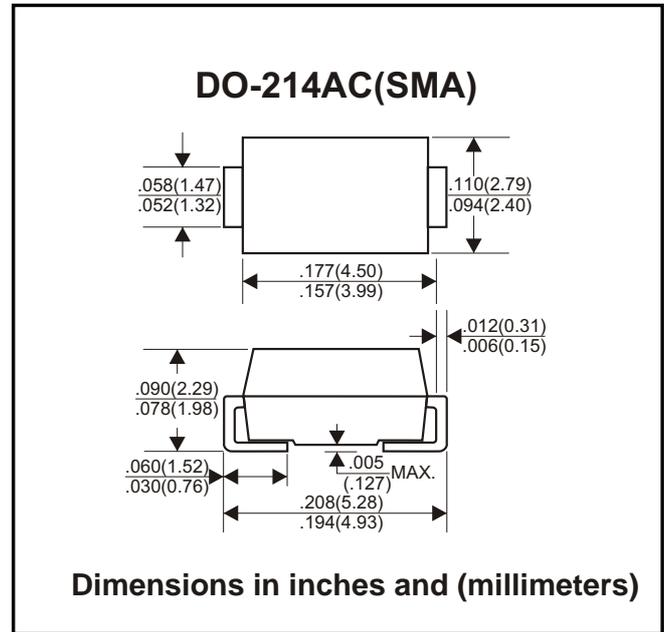


SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

M1 - M7

FEATURES

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Construction utilizes void-free molded plastic technique
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed: 250°C/10 seconds, 0.375" (9.5mm) lead length, 5 lbs. (2.3kg) tension



MECHANICAL DATA

Case: JEDEC SMA molded plastic body

Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026

Polarity: Color band denotes cathode end

Mounting Position: Any

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	SYMBOLS	M1	M2	M3	M4	M5	M6	M7	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current 0.375 (9.5mm) lead length at $T_A=25$	$I_{(AV)}$	1.0							Amps
Peak Forward Surge Current 8.3mS single half sine wave superimposed on rated load (JEDEC method)	I_{FSM}	30							Amps
Maximum Instantaneous Forward Voltage @ 1.0A	V_F	1.1							Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage per element	I_R	$T_A = 25$							" A
		$T_A = 100$							
Maximum Full Load Reverse Current, full cycle average 0.375 (9.5mm) lead length at $T_L=75$	$I_{R(AV)}$	30							" A
Typical Junction Capacitance (Note 1)	C_J	13							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	50							/W
Operating Junction Temperature Range	T_J	-55 to +150							
Storage Temperature Range	T_{STG}	-55 to +150							

Notes: 1. Measured at 1.0MHz and Applied Reverse Voltage of 4.0V DC.
2. Thermal Resistance from junction to terminal 6.0mm² copper pads to each terminal.

FIG. 1 -- TYPICAL FORWARD CHARACTERISTIC

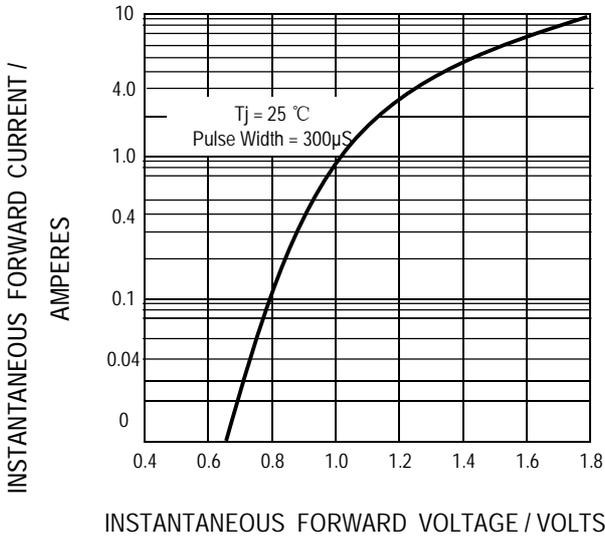


FIG. 2 -- TYPICAL JUNCTION CAPACITANCE

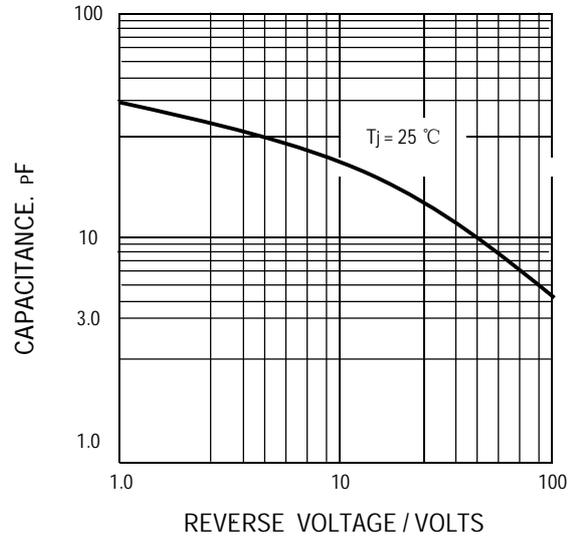


FIG. 3 -- FORWARD CURRENT DERATING CURVE

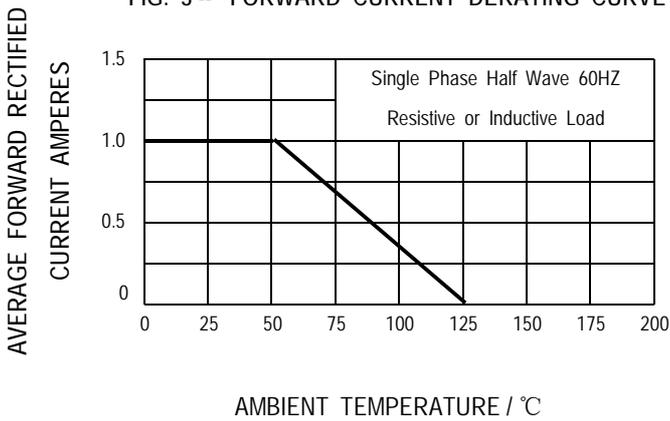


FIG. 4 -- PEAK FORWARD SURGE CURRENT

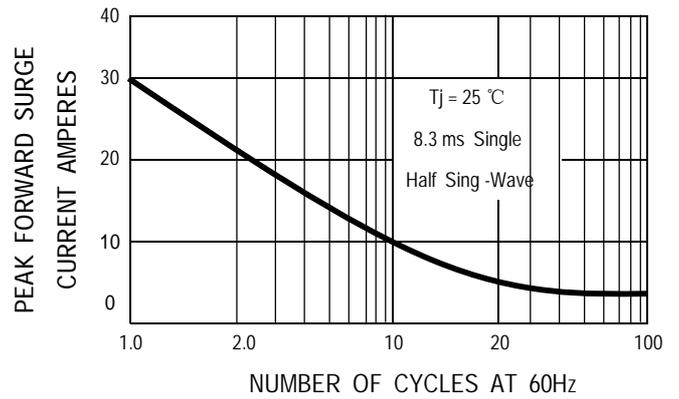


Fig.5-Typical transient thermal impedance

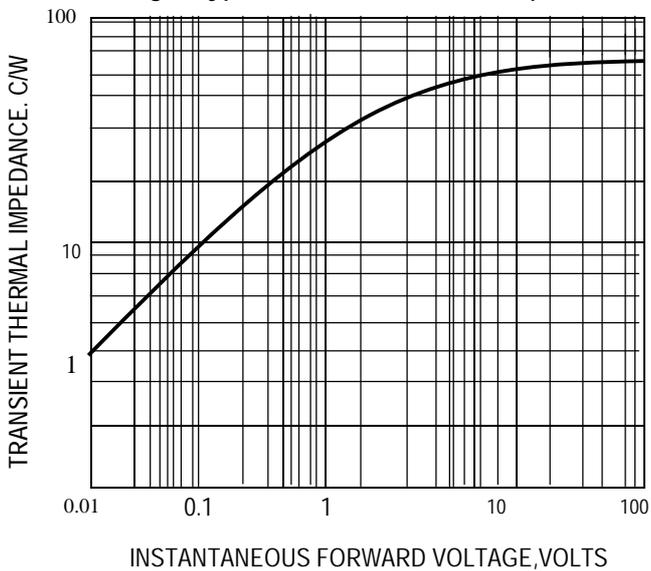


Fig.6-TYPICAL REVERSE CHARACTERISTICS

