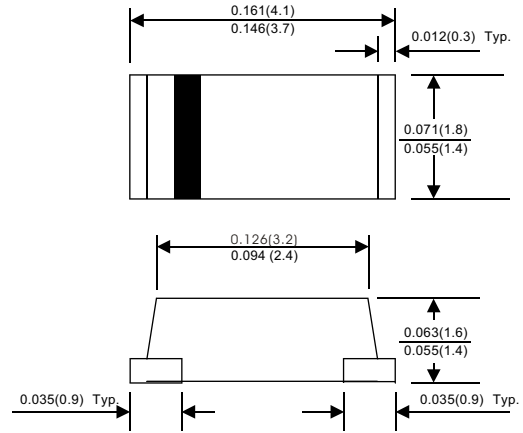


MS120 THRU MS1100 CHIP SCHOTTKY BARRIER DIODES

FEATURES:

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0 Utilizing Flame Retardant Epoxy Molding Compound
- For surface mounted applications
- Exceeds environmental standards of ML-S-19500 / 228
- Low leakage current

MINI/SOD-123



MECHANICAL DATA

Case: Molded plastic, JEDEC SOD-123 / MINI SMA
 Terminals: Solder Plated, solderable per MIL-STD-750, Method 2026
 Polarity : Any
 Mounting Position: Any
 Weight: 0.04g

Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

Characteristic	Symbol	MS 120	MS 130	MS 140	MS 150	MS 160	MS 180	MS 1100	Units
	Marking	SS12	SS13	SS14	SS15	SS16	SS18	S110	
Maximum recurrent peak reverse voltage	V _{RRM}	20	30	40	50	60	80	100	Volts
Maximum RMS voltage	V _{RMS}	14	21	28	35	42	56	70	Volts
Maximum DC voltage	V _{DC}	50	30	40	50	60	80	100	Volts
Maximum average forward rectified current at See Fig. 1	I <sub(av)< sub=""></sub(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 drop per leg at 1.0A (NOTE 2)	V _F	0.55		0.70		0.85		Volts	
Maximum instantaneous reverse current at rated DC blocking voltage (NOTE 2)	I _R	0.5 10							mA
Typical junction (NOTE 1)	C _J	120							PF
Typical thermal resistance from junction to ambient	R _{th JA}	98							°C/W
Operating temperature range	T _J	-55 to +125			-55 to +150				°C
storage temperature range	T _{stg}	-55 to +150							°C

NOTES:
 (1) Measured at 1.0 MHz and applied reverse of 4.0 Volts
 (2) Pulse test: 300 us pulse width, 1% duty cycle

RATING AND CHARACTERISTIC CURVES MS120 THRU MS1100

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

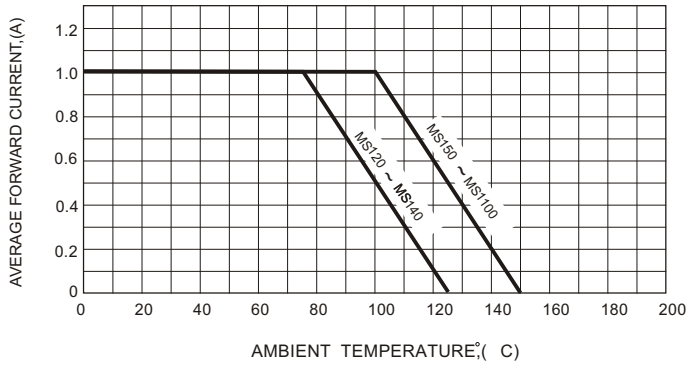


FIG.2-TYPICAL FORWARD CHARACTERISTICS

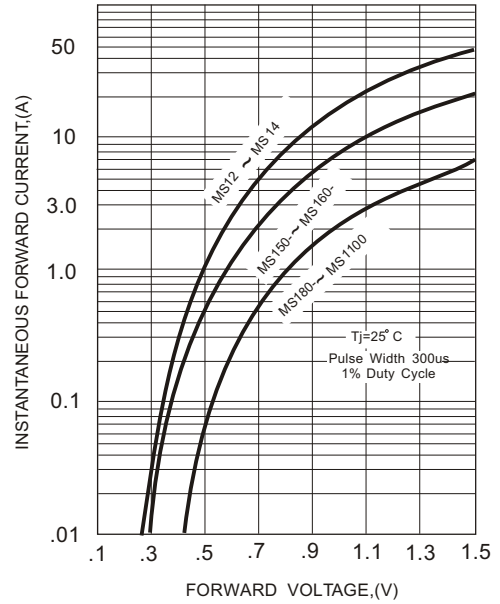


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

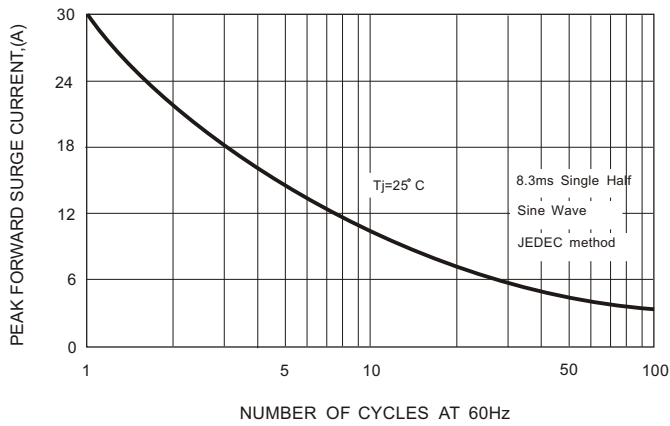


FIG.4-TYPICAL JUNCTION CAPACITANCE

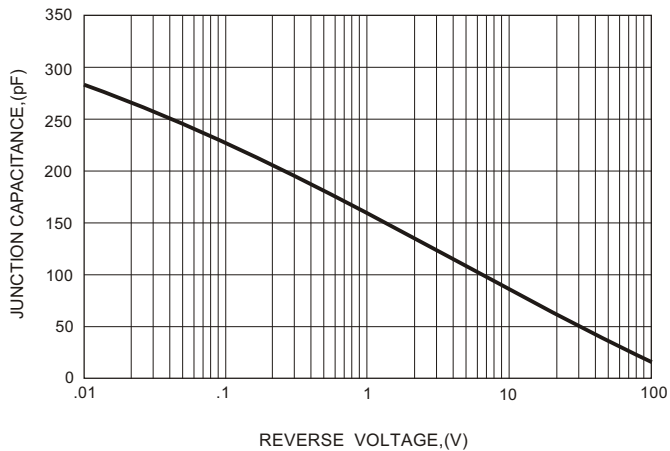


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

