

VOLTAGE RANGE: 50 - 1000V
CURRENT: 1.0A

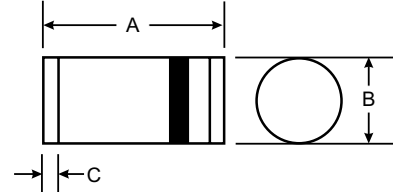


Features

- Glass passivated device
- Ideal for surface mounted applications
- Low reverse leakage
- Metallurgically bonded construction
- High temperature soldering guaranteed:
 ● 250°C/10 seconds, 0.375" (9.5mm) lead length,
 5 lbs. (2.3kg) tension

Mechanical Data

- Case: LL41(DO-213AB), Plastic
- Terminals: Solderable per MIL-STD-202, Method 208
- Polarity: Cathode band
 Approx Weight: 0.25 grams
- Mounting Position: Any
- Marking: Cathode Band Only



LL41/ DO-213AB		
Dim	Min	Max
A	4.80	5.20
B	2.40	2.60
C	0.55 Nominal	
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics T_A = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

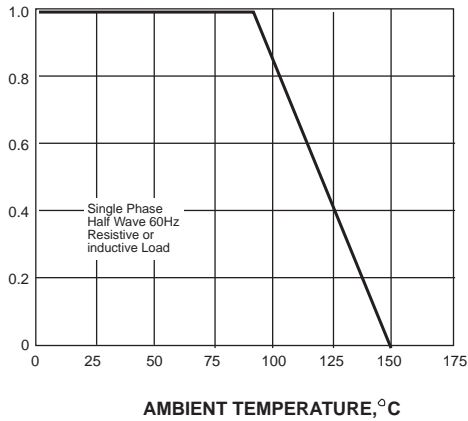
Characteristic	Symbol	SM101	SM102	SM103	SM104	SM105	SM106	SM107	Unit
Maximum repetitive peak reverse voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V _{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V _{DC}	50	100	200	400	600	800	1000	V
Maximum average forward rectified current at T _A =65°C (NOTE 1)	I _(AV)	1.0							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) T _L =25°C	I _{FSM}	30.0							A
Maximum instantaneous forward voltage at 1.0A	V _F	1.3							V
Maximum DC reverse current at rated DC blocking voltage T _A =25°C T _A =100°C	I _R	5.0 100.0							μA
Maximum reverse recovery time (NOTE 2)	t _{rr}	150			250		500		ns
Typical junction capacitance (NOTE 3)	C _J	15							pF
Typical thermal resistance (NOTE 4)	R _{θJA}	180							K/W
Operating junction and storage temperature range	T _J , T _{STG}	-50 to +150							°C

- Note:**
1. Averaged over any 20ms period.
 2. Measured with I_F=0.5A, I_R=1A, I_{rr}=0.25A.
 3. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
 4. Thermal resistance junction to ambient, 6.0 mm² copper pads to each terminal.

RATINGS AND CHARACTERISTIC CURVES SM101 THRU SM107

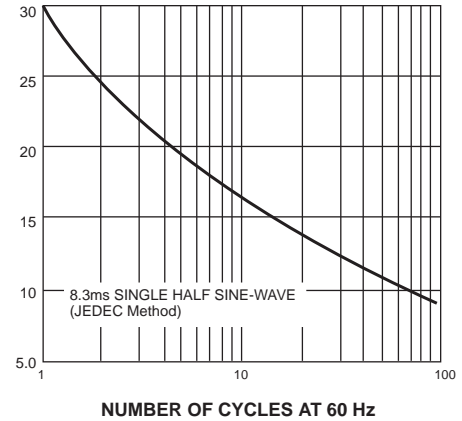
AVERAGE FORWARD RECTIFIED CURRENT,
AMPERES

FIG. 1- FORWARD CURRENT DERATING CURVE



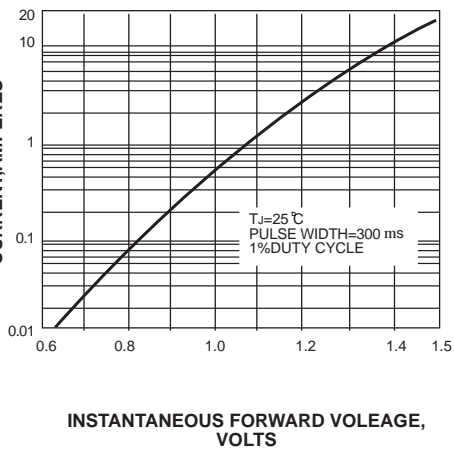
PEAK FORWARD SURGE CURRENT,
AMPERES

FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



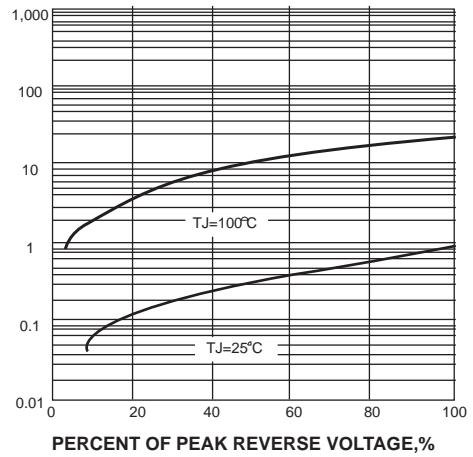
INSTANTANEOUS FORWARD CURRENT, AMPERES

FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



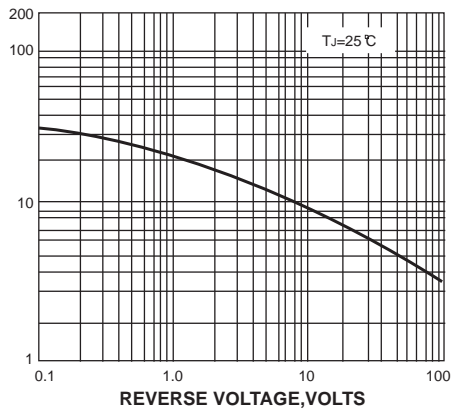
INSTANTANEOUS REVERSE CURRENT, MICROAMPERES

FIG. 4-TYPICAL REVERSE CHARACTERISTICS



JUNCTION CAPACITANCE, pF

FIG. 5-TYPICAL JUNCTION CAPACITANCE



TRANSIENT THERMAL IMPEDANCE, °C/W

FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE

