SD103A THUR SD103C
SMALL SIGNAL SCHOTTKY DIODES

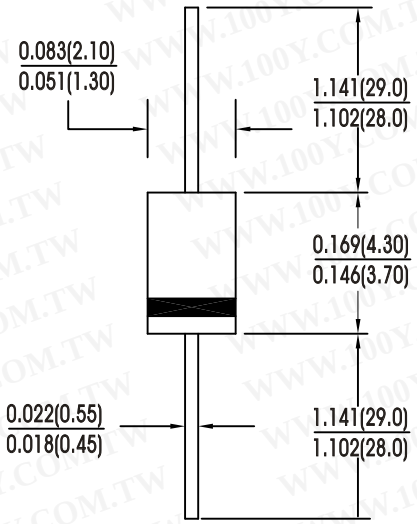
FEATURES:

- For general purpose applications
- Low forward voltage drop
- Fast switching make it ideal for protection MOS devices,steering,biasing,couping diodes for fast switching and low logic leven applications
- These diodes are also available in the Mini-MELF case with the type desingation LL103A to thru LL103C

MECHANICAL DATA

Case: DO-35 case
Weight:Approx. 0.13gram

DO-35



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	SD103A	SD103B	SD103C	Units
Peak reverse voltage	V_{RRM}	40	30	20	Volts
Power Dissipation (infinite Heat Sink) (NOTE 1)	Ptot	400			mW
Maximum Single surge 60 hz square wave	I_{FSM}	15			Amps
Maximum Leakage current VR=30V	I_R	5			uA
Maximum Leakage current VR=20V	I_R		5		uA
Maximum Leakage current VR=10V	I_R			5	uA
Maximum instantaneous forward voltage drop per leg at IF=20mA	V_F	0.37			Volts
Maximum instantaneous forward voltage drop per leg at IF=200mA	V_F	0.60			Volts
Typical Junction Capacitance at V_R = 0 V, f=1MHZ	C_J	50			PF
Typical Reverse recovery time (NOTE 2)	T_{RR}	10			ns
Maximum thermal resistance junction to ambient	T_{th} JA	300			K/W
Operating temperature range	TJ	-55 to+125			℃
Storage temperature range	Tstg	-55 to+150			℃

NOTES:
(1) Valid provided that electrodes are kept at ambient temperature
(2)Reverse recovery condition $I_F = I_R$=0.05A ,Recover to 0.2A,Recover to 0.1 I_R

RATINGS AND CHRACTERISTIC CURVESL SD103A THRU SD103C

FIG.1 - TYPICAL FORWARD CHARACTERISTICS

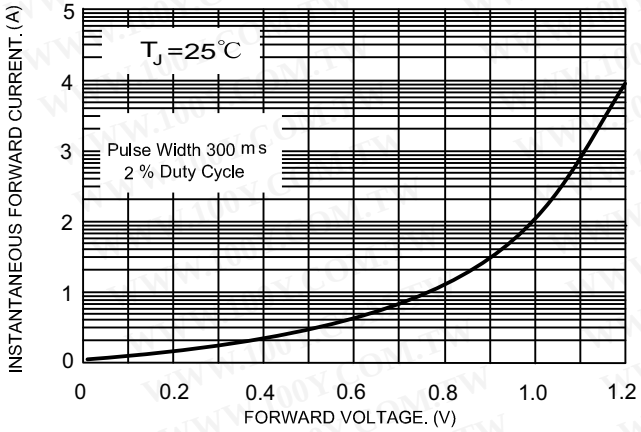
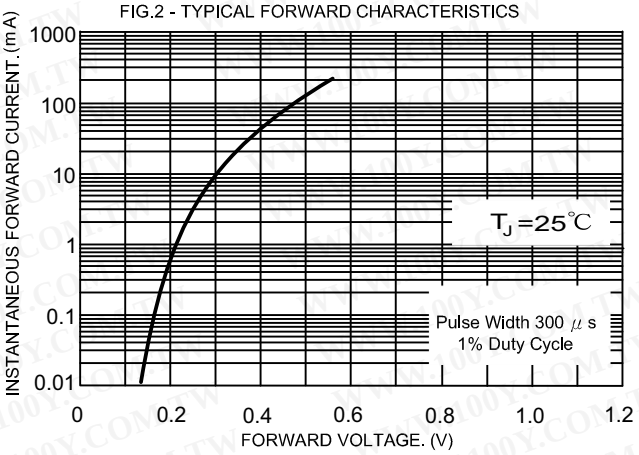


FIG.2 - TYPICAL FORWARD CHARACTERISTICS



T_J= 25℃
F=1.0MHZ
Vsig=50mVp-p

FIG.3 - NON-REPETITIVE FORWARD SURGE CURRENT

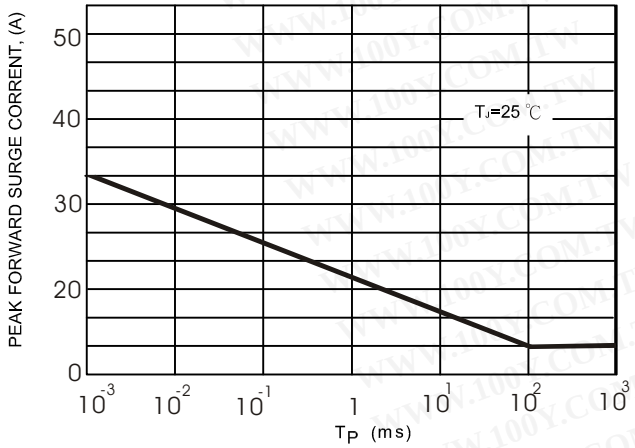


FIG.4- TYPICAL JUNCTION CAPACITANCE

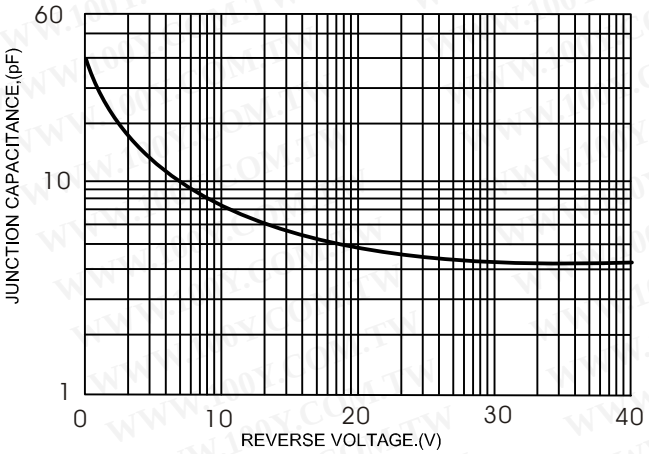


FIG.5- TYPICAL REVERSE CHARACTERISTICS

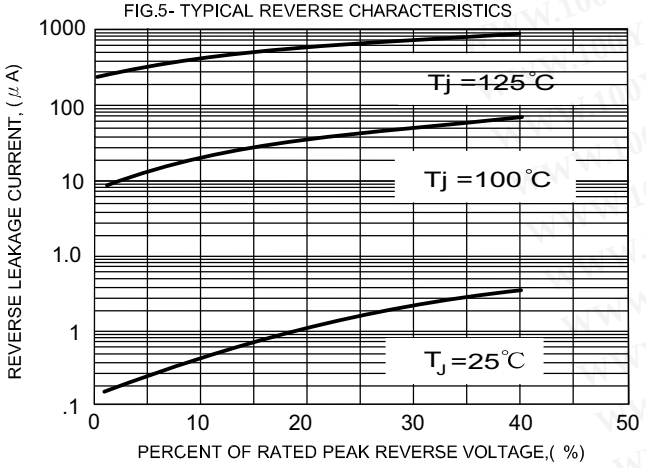


FIG.6 - FORWARD CURRENT