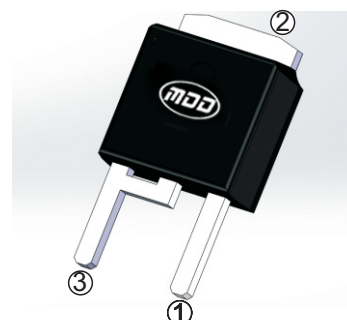


SCHOTTKY BARRIER RECTIFIER

FEATURES

- ◆ Low power loss, high efficiency
- ◆ Low forward voltage drop
- ◆ High surge capability
- ◆ High temperature soldering guaranteed
- ◆ Mounting position: any

TO-251ACW



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

MCHARACTERISTICS	SYMBOL	SL3100NS	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	100	V
Maximum RMS voltage	V_{RMS}	70	V
Maximum DC blocking voltage	V_{DC}	100	V
Maximum average forward rectified current	$I_{(AV)}$	3.0	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	100	A
Maximum instantaneous forward voltage at 3.0A	V_F	0.60	V
Maximum DC reverse current $T_A=25^{\circ}C$ at rated DC blocking voltage $T_A=125^{\circ}C$	I_R	0.02 50	mA
Typical junction capacitance (NOTE 1)	C_J	620	pF
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	55	$^{\circ}C/W$
Operating junction and storage temperature range	T_J, T_{STG}	-55 to +150	$^{\circ}C$

Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Thermal resistance from junction to case.
3. Reverse Recovery Test Conditions: $I_F=0.5A$, $I_R=1A$, $I_{rr}=0.25A$.



Rating and Characteristic Curves

Fig.1 TYPICAL FORWARD CURRENT DERATING CURVE

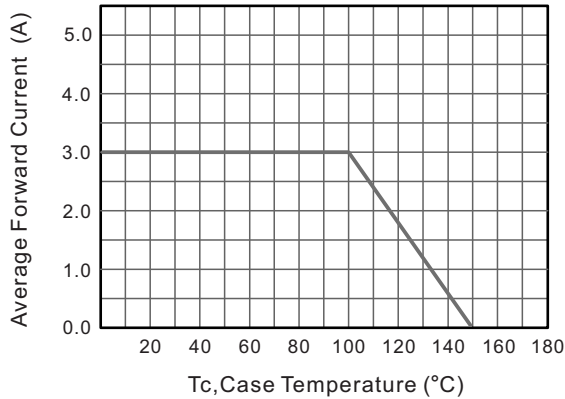


Fig.2 Typical Reverse Characteristics

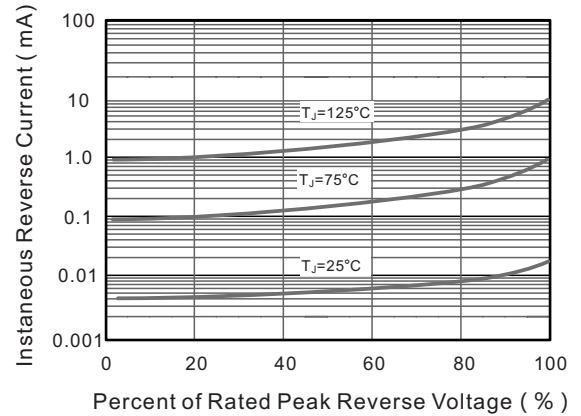


Fig.3 Typical Forward Characteristic

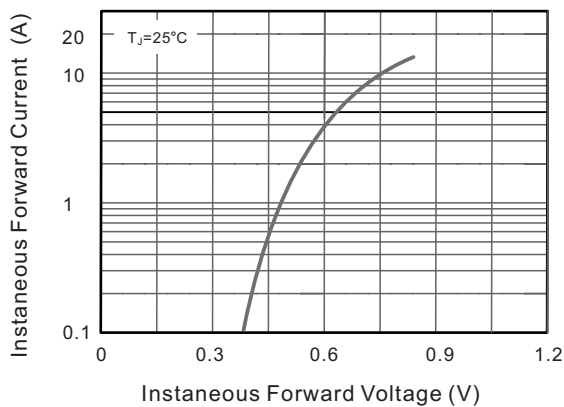


Fig.4 Typical Junction Capacitance

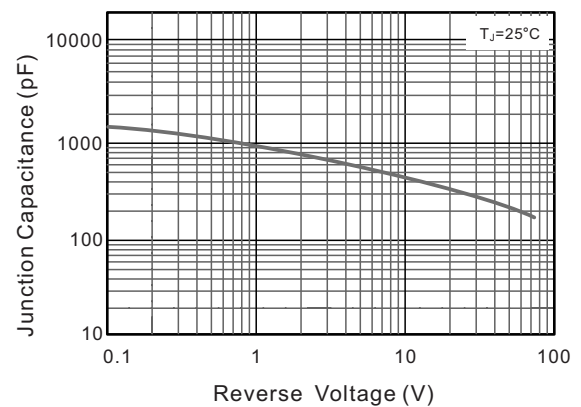


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

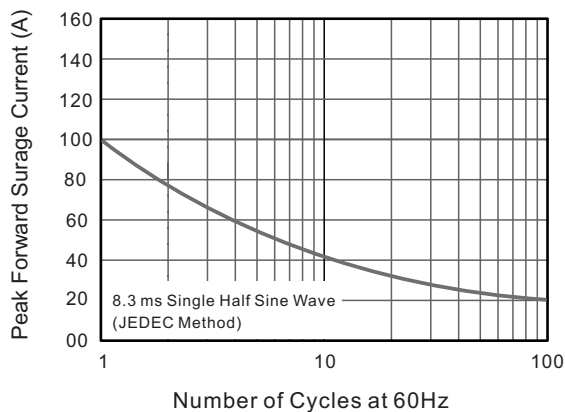
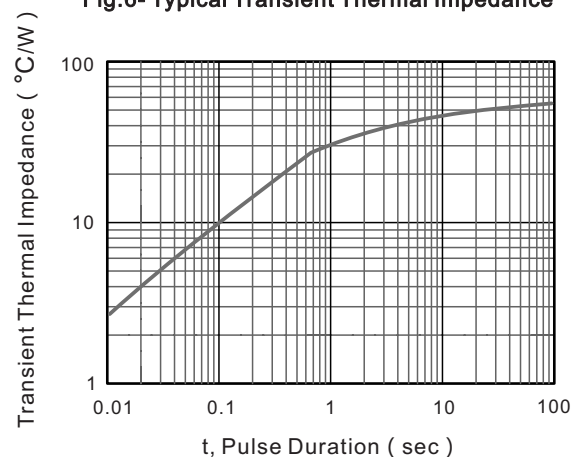


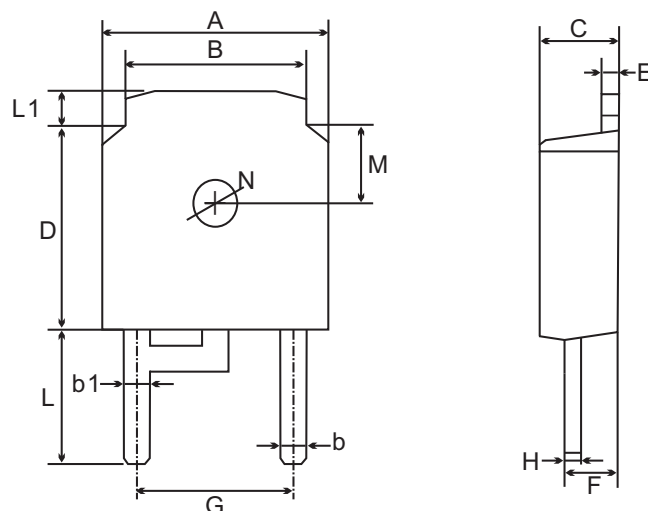
Fig.6- Typical Transient Thermal Impedance



The curve above is for reference only.

Outlitne Drawing

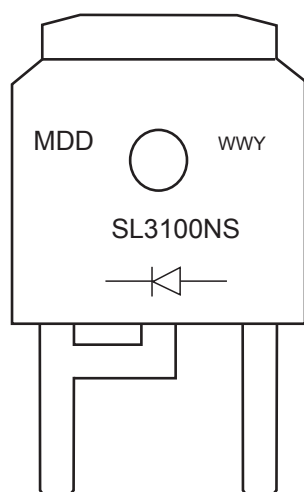
TO-251ACW Package Outline Dimensions



TO-251ACW mechanical data

UNIT		A	B	b	b1	C	D	E	F	G	H	L	L1	M	N
mm	max	6.7	5.5	0.8	0.9	2.5	6.3	0.6	1.8	4.60 TYPICAL	0.55	4.3	1.2	1.8 TYPICAL	1.3 TYPICAL
	min	6.3	5.1	0.3	0.76	2.1	5.9	0.4	1.3		0.45	3.9	0.8		
mil	max	264	217	31	35	98	248	24	71	181 TYPICAL	22	169	47	71 TYPICAL	51 TYPICAL
	min	248	201	12	30	83	232	16	51		18	154	31		

Marking Drawing



WWY: Date Code
 WW: Week
 Y: Numeric code at the end of the year (A~K)
 SL3100NS : Product name
 (NOTE: The weekly code is based on the actual number of weeks in the calendar year.)

Package Specifications

Package	Reel Size	Reel DIA. (mm)	Q'TY/Reel (pcs)	Box Size (mm)	QTY/Box (pcs)	Carton Size (mm)	Q'TY/Carton (pcs)
TO-251ACW	13'	330	2500	340×336×29	2500	353×346×365	25000