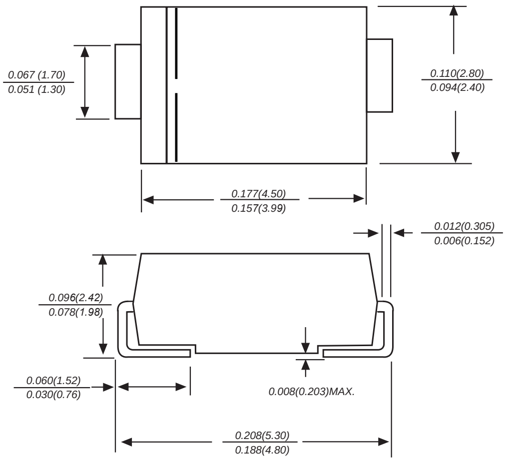
JXND ELECTRONICS CO.,LTD

SURFACE MOUNT SCHOTTKY BARRIER DIODES SL32A THRU SL310A

Features

1. The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
2. For surface mounted applications
3. Metal silicon junction,majority carrier conduction
4. Low power loss,high efficiency
5. Built-in strain relief,ideal for automated placement
6. High forward surge current capability
7. High temperature soldering guaranteed: 260°C/10 seconds at terminals

DO-214AC/SMA



Dimensions in inches and (millimeters)

Mechanical Data

Case : JEDEC DO-214AC/SMA Molded plastic body

Terminals : Solder plated, solderable per MIL-STD-750, Method 2026

Polarity : Polarity symbol marking on body

Mounting Position : Any

Weight : 0.002ounce, 0.07 grams

Maximum Ratings And Electrical Characteristics

Ratings at 25°C ambient temperature unlss otherwise specified. Single phase half-wave 60Hz,resistive or inductive load,for capacitive load current derate by 20%.

Parameter	SYMBOLS	SL32A	SL33A	SL34A	SL35A	SL36A	SL38A	SL310A	UNITS
Marking Code		SL32A	SL33A	SL34A	SL35A	SL36A	SL38A	SL310A	
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	50	60	80	100	V
Maximum RMS voltage	V_{RMS}	14	21	28	35	42	56	70	V
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	80	100	V
Maximum average forward rectified current at TL(see fig.1)	$I_{(AV)}$	3.0							A
Peak forward surge current 8.3ms single half sine-wave superimposed onrated load (JEDEC Method)	I_{FSM}	70							A
Maximum instantaneous forward voltage at 3.0A	V_F	0.45			0.50		0.70		V
Maximum DC reverse current T_A=25℃ at rated DCblocking voltage T_A=125℃	I_R	0.5 20.0					0.2 10.0		mA
Typical junction capacitance (NOTE 1)	CJ	500			300				pF
Typical thermal resistance (NOTE 2)	$R_{θJA}$	75.0							℃/W
Operating junction temperature range	T_J	-55 to +125					-55 to +150		℃
Operating storage temperature range	T_{STG}	-55 to +150							℃

Note:1.Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2.P.C.B. mounted with 2.0x2.0"(5.0x5.0cm) copper pad areas.

Ratings And Characteristic Curves

FIG. 1- FORWARD CURRENT DERATING CURVE

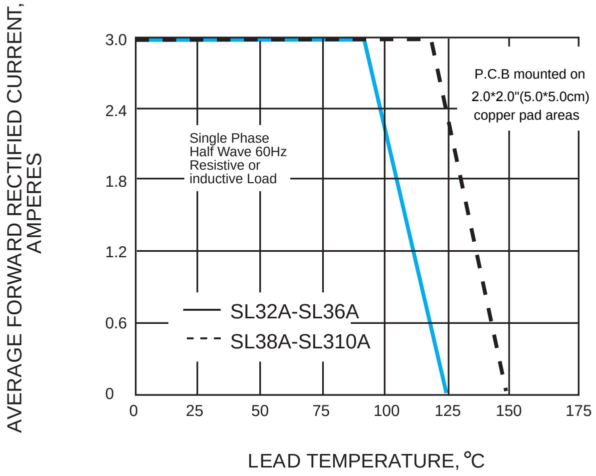


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

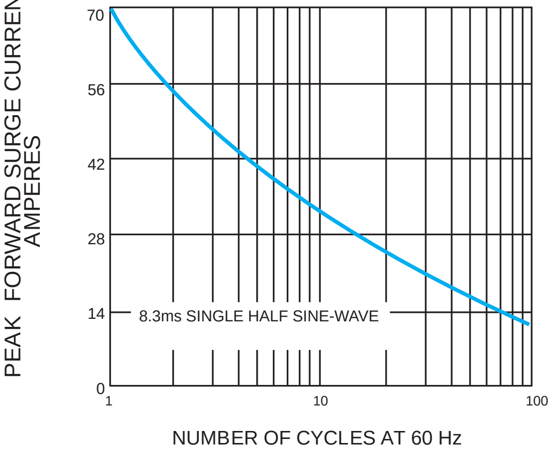


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

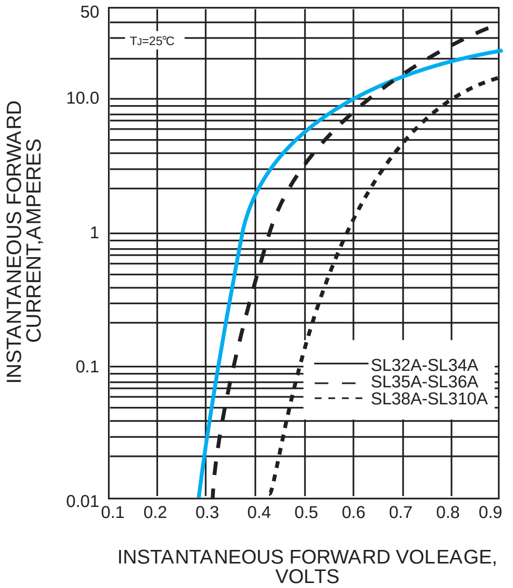


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

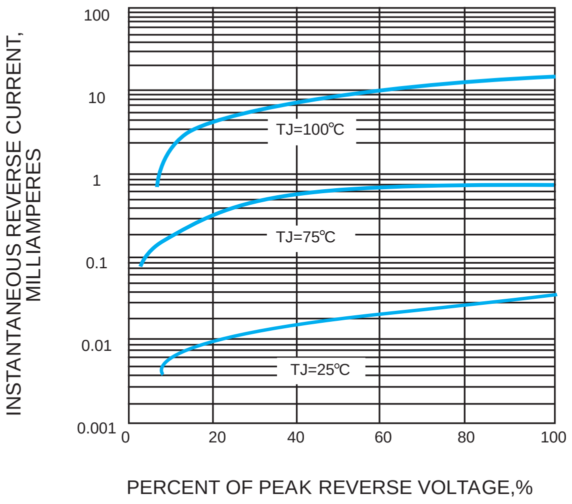


FIG. 5-TYPICAL JUNCTION CAPACITANCE

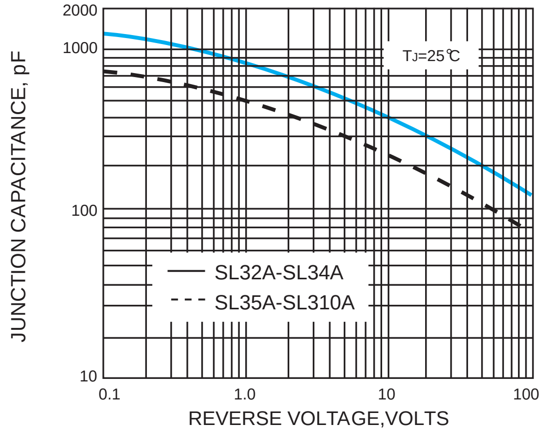
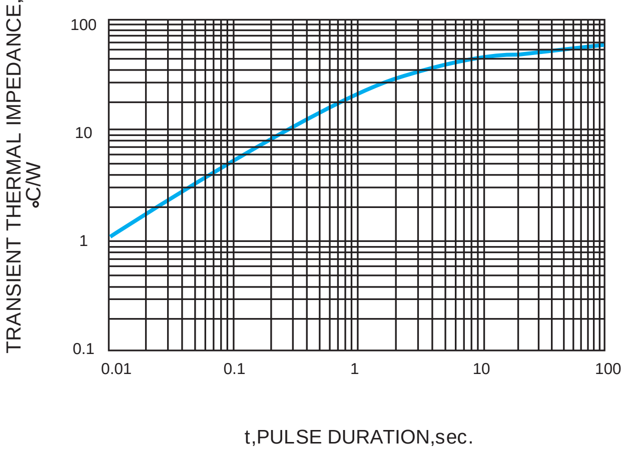
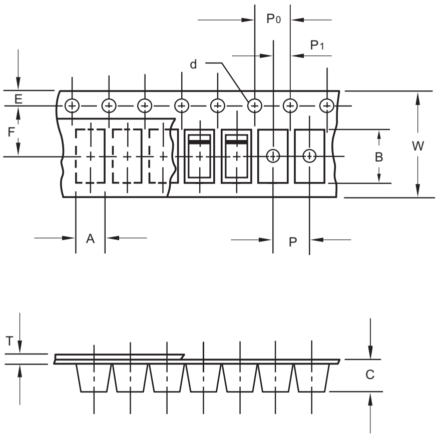
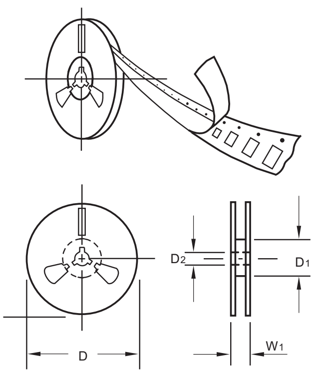


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE



Packing information





unit:mm

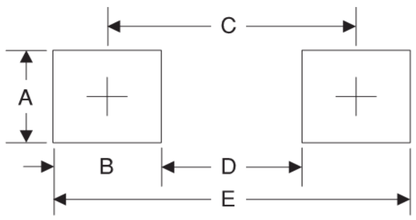
Item	Symbol	Tolerance	SMA
Carrier width	A	0.1	2.80
Carrier length	B	0.1	5.33
Carrier depth	C	0.1	2.36
Sprocket hole	d	0.05	1.50
13" Reel outside diameter	D	2.0	330.00
13" Reel inner diameter	D_1	min	50.00
7" Reel outside diameter	D	2.0	178.00
7" Reel inner diameter	D_1	min	62.00
Feed hole diameter	D_2	0.5	13.00
Sprocket hole position	E	0.1	1.75
Punch hole position	F	0.1	5.50
Punch hole pitch	P	0.1	4.00
Sprocket hole pitch	P_0	0.1	4.00
Embossment center	P_1	0.1	2.00
Overall tape thickness	T	0.1	0.28
Tape width	W	0.3	12.00
Reel width	W_1	1.0	18.00

Note:Devices are packed in accor dance with EIA standar RS-481-A and specifications listed above.

Reel packing

PACKAGE	REEL SIZE	REEL (pcs)	COMPONENT SPACING (m/m)	BOX (pcs)	INNER BOX (m/m)	REEL DIA, (m/m)	CARTON SIZE (m/m)	CARTON (pcs)	APPROX. GROSS WEIGHT (kg)
SMA	7"	2,000	4.0	4,000	183*155*183	178	382*356*392	80,000	12.0
SMA	11"	5,000	4.0	10,000	290*290*38	330	310*310*360	80,000	11.0
SMA	13"	7,500	4.0	15,000	335*335*38	330	350*330*360	120,000	14.5

Suggested Pad Layout



Symbol	Unit (mm)	Unit (inch)
A	1.68	0.066
B	1.52	0.060
C	3.90	0.154
D	2.41	0.095
E	5.45	0.215