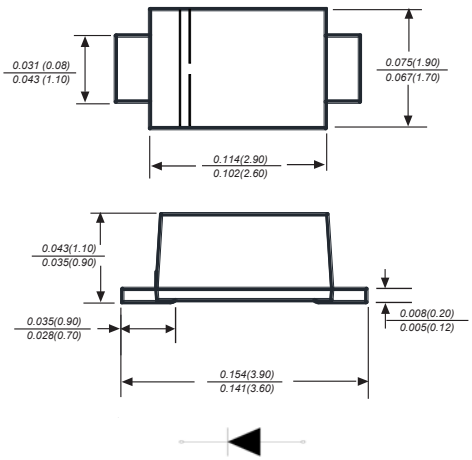
SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER DSK22 THRU DSK220

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: 250 °C/10 seconds at terminals

SOD-123FL



Dimensions in inches and (millimeters)

Mechanical Data

Case : JEDEC SOD-123FL molded plastic body
Terminals : Solderable per MIL-STD-750, Method 2026
Polarity : Color band denotes cathode end Mounting
Position : Any
Weight : 0.0007 ounce, 0.02 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	DSK22	DSK24	DSK25	DSK26	DSK28	DSK210	DSK215	DSK220	UNITS
Marking Code		K22	K24	K25	K26	K28	K210	K215	K220	
Maximum repetitive peak reverse voltage	V_{RRM}	20	40	50	60	80	100	150	200	V
Maximum RMS voltage	V_{RMS}	14	28	35	42	56	70	105	140	V
Maximum DC blocking voltage	V_{DC}	20	40	50	60	80	100	150	200	V
Maximum average forward rectified current at TL(see fig.1)	$I_{(AV)}$	2.0								A
Peak forward surge current 8.3ms single half sine-wave superimposed onrated load (JEDEC Method)	I_{FSM}	40								A
Maximum instantaneous forward voltage at 2.0A	V_F	0.55			0.70		0.85			V
Maximum DCreverse current at rated DCblocking voltage T_A=25℃	I_R	0.5								mA
T_A=125℃		10.0					5.0			
Typical junction capacitance (NOTE 1)	C_J	220		80						pF
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	85.0								℃/W
Operating junction temperature range	T_J	-55 to +125								℃
Storage temperature range	T_{STG}	-55 to +150								℃

Note:1.Measured at 1MHz and applied reverse voltage of 4.0V D.C.

Typical Characterisitics

Fig.1 Forward Current Derating Curve

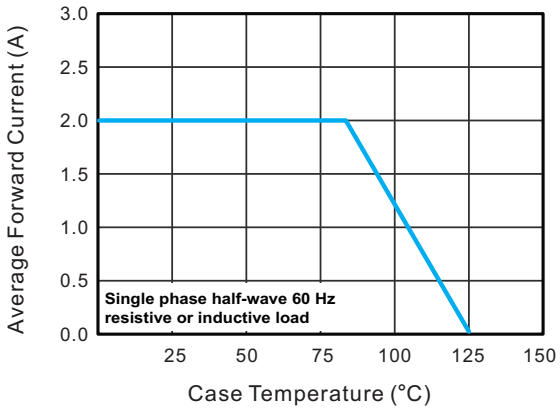


Fig.2 Typical Reverse Characteristics

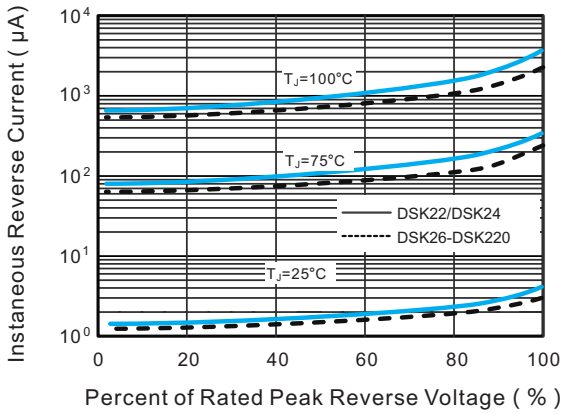


Fig.3 Typical Forward Characteristic

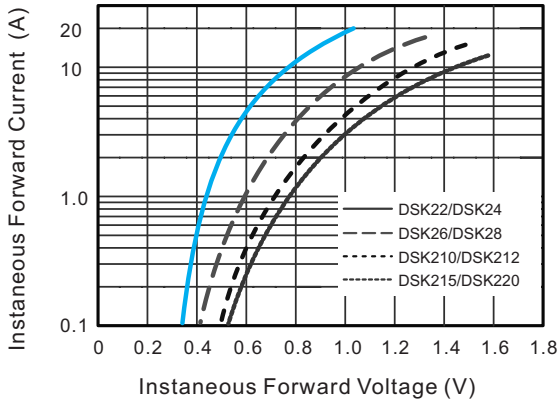


Fig.4 Typical Junction Capacitance

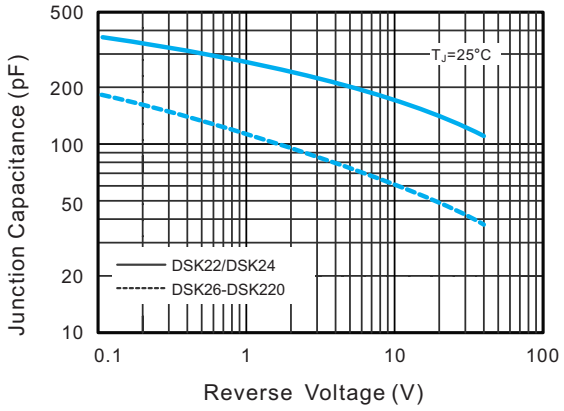


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

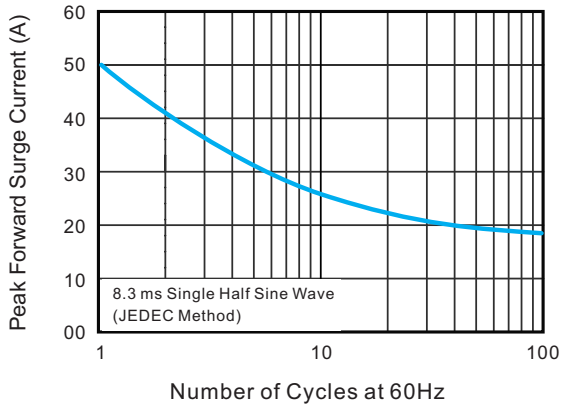
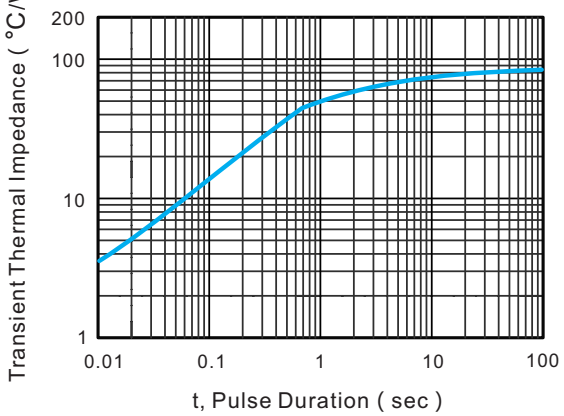


Fig.6- Typical Transient Thermal Impedance



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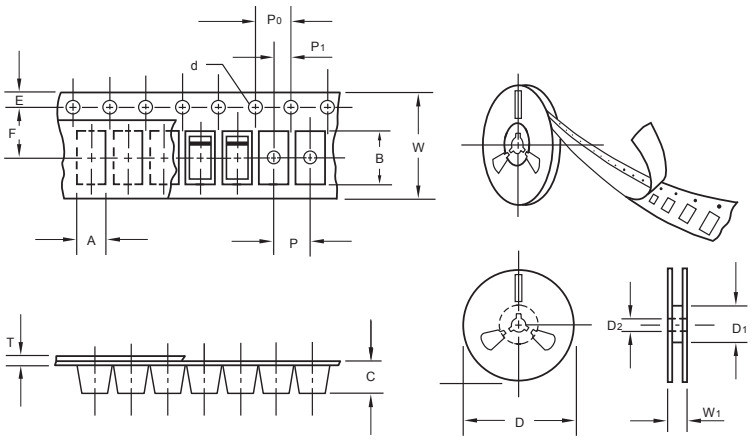
Packing information



unit:mm

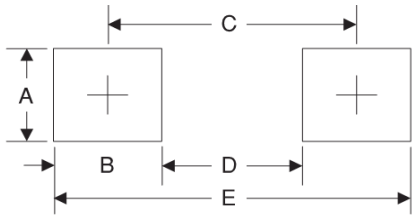
Item	Symbol	Tolerance	SOD-123FL
Carrier width	A	0.1	2.1
Carrier length	B	0.1	4.0
Carrier depth	C	0.1	1.60
Sprocket hole	d	0.05	1.55
7" Reel outside diameter	D	2.0	178.00
7" Reel inner diameter	D_1	min	50.0
Feed hole diameter	D_2	0.5	13.00
Sprocket hole position	E	0.1	1.75
Punch hole position	F	0.1	3.50
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	0.25
Tape width	W	0.3	8.15
Reel width	W_1	1.0	10.5

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)
SOD-123FL	7"	3,000	4.0	45,000	210*208*203	178	430*430*235	180,000	9.0

Suggested Pad Layout



Symbol	Unit (mm)	Unit (inch)
A	1.2	0.047
B	1.2	0.047
C	3.2	0.126
D	2	0.079
E	4.4	0.173