

Surface Mount Schottky Barrier Rectifiers

REVERSE VOLTAGE: 20 - 100 V

SD22-SD210

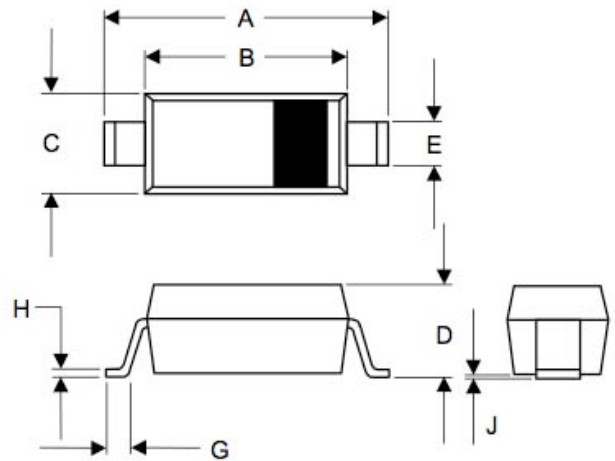
FEATURES

- Guarding protection
- Low forward voltage
- Reverse energy tested
- High current capability
- Extremely low thermal resistance

MECHANICAL DATA

- Case: SOD-123 Molded plastic
- Epoxy: UL94V-O rate flame retardant
- Lead: Lead Formed for Surface Mount
- Polarity: Color band denotes cathode end
- Mounting position: Any

SOD-123



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.140	.152	3.55	3.85	
B	.100	.112	2.55	2.85	
C	.055	.071	1.40	1.80	
D	-----	.053	-----	1.35	
E	.012	.031	0.30	.78	
G	.006	-----	0.15	-----	
H	-----	.01	-----	.25	
J	-----	.006	-----	.15	

Absolute Maximum Ratings (Ta = 25 °C)

ITEM	Symbol	Conditions	Rating				Unit
			SD22	SD24	SD26	SD210	
Repetitive peak reverse voltage	V _{RRM}		20	40	60	100	V
Average forward current	I _{F(AV)}		2.0				A
Peak forward surge current	I _{FSM}	8.3ms single half sine-wave	50				A
Operating junction temperature Range	T _J		-55 to +125		-55 to +150		°C
Storage temperature Range	T _{STG}		-55 to +150				°C

Electrical characteristics (Ta = 25 °C)

ITEM	Symbol	Conditions	Type	Min.	Typ.	Max.	Unit
Forward voltage (NOTE 1)	V _F	I _F = 1.0A I _F = 2.0A	SD22 / SD24	-	0.41 0.49	- 0.50	V
		I _F = 1.0A I _F = 2.0A	SD26	-	0.50 0.60	- 0.70	V
		I _F = 1.0A I _F = 2.0A	SD210	-	0.62 0.75	- 0.85	V
Repetitive peak reverse current	I _{RRM}	V _R = Max. V _{RRM} , Ta = 25 °C		-	0.025	0.20	mA
Junction capacitance	C _J	V _R = 4V, f = 1.0 MHz		-	115	-	pF
Thermal resistance	R _{th(JA)}	Junction to ambient (NOTE 2)		-	75	-	°C/W
	R _{th(JL)}	Junction to lead (NOTE 2)		-	17	-	°C/W

NOTE:

Pulse test: Pulse width 300us, duty cycle 1%

Ratings and Characteristic Curves

FIG. 1 FORWARD DERATING CURVE

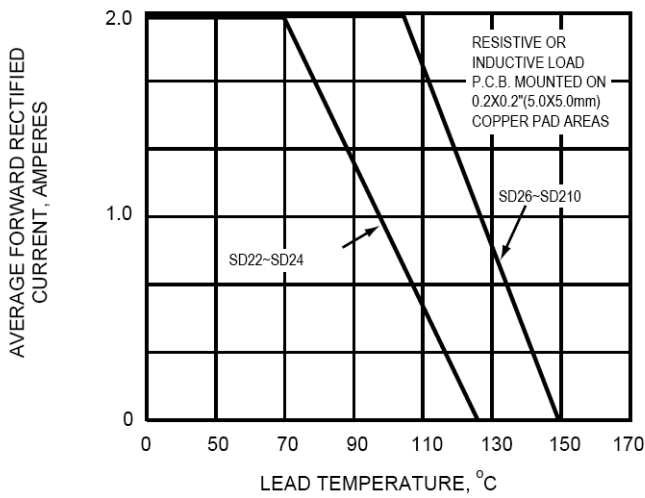


FIG. 2 PEAK FORWARD SURGE CURRENT

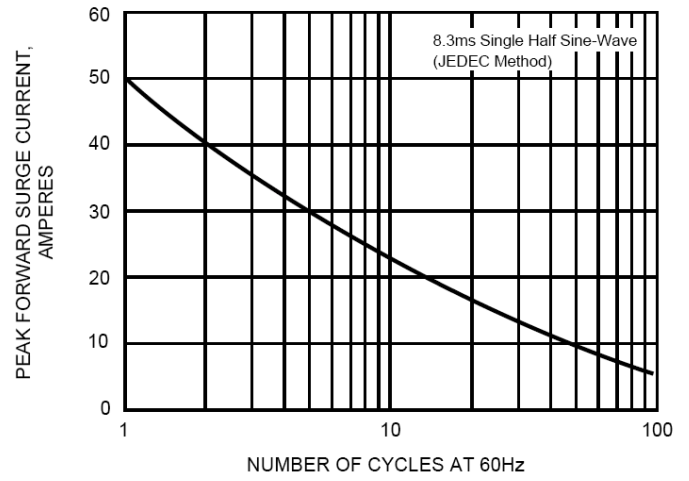


FIG. 3 TYPICAL FORWARD CHARACTERISTICS

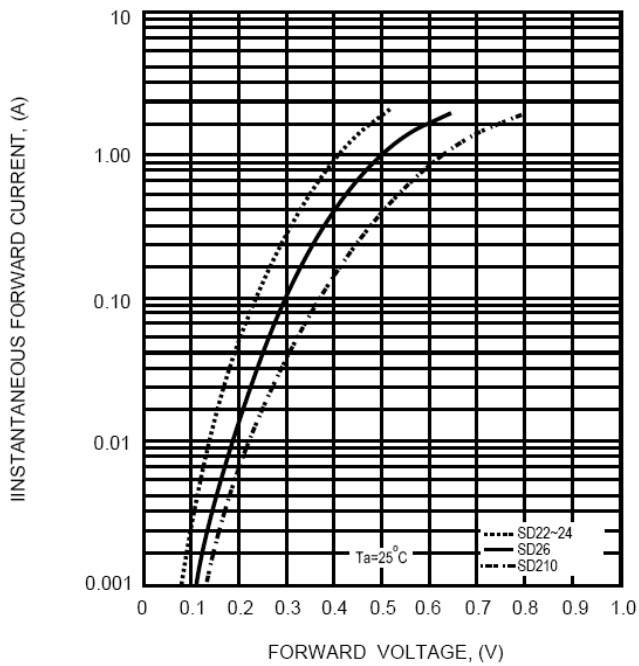


FIG. 4 TYPICAL REVERSE CHARACTERISTICS

