BORN SEMICONDUCTOR

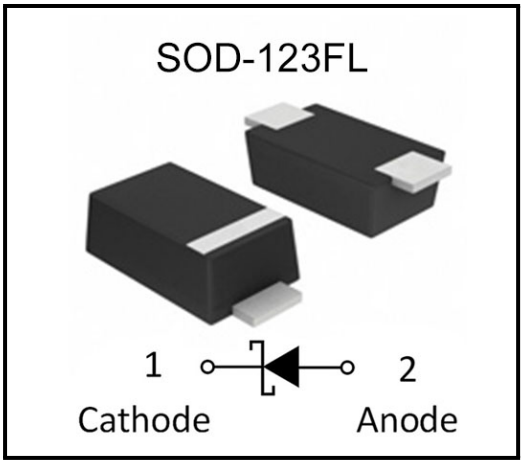
DSS22-DSS220

Schottky Barrier Diode

Features

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- Epitaxial construction

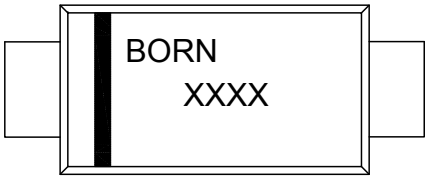
Package



Description

- Case: molded plastic
- Polarity: Color band denotes cathode
- Package: SOD-123FL Plastic Package

Marking



Ordering information

Part Number	DSS22	DSS23	DSS24	DSS25	DSS26	DSS27	DSS28	DSS29	DSS210	DSS215	DSS220
Marking	K22	K23	K24	K25	S26	K27	K28	K29	K210	K215	K220
Base qty	3K	3K	3K	3K	3K	3K	3K	3K	3K	3K	3K

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DSS22-DSS220

Schottky Barrier Diode

Maximum Ratings and Electrical Characteristics@T_A=25°C unless otherwise noted

Symbol	Parameter	DSS 22	DSS 23	DSS 24	DSS 25	DSS 26	DSS 27	DSS 28	DSS 29	DSS 210	DSS 215	DSS 220	Units
V_{RRM}	Max. Repetitive Peak Reverse Voltage	20	30	40	50	60	70	80	90	100	150	200	V
V_{RMS}	Maximum RMS Voltage	14	21	28	35	42	49	56	63	70	105	140	V
V_{DC}	Maximum DC Blocking Voltage	20	30	40	50	60	70	80	90	100	150	200	V
$I_{F(AV)}$	Max.average forward Rectified Current	2.0											A
I_{FSM}	Non-repetitive peak forward surge current 8.3 ms singlehalf sine-wave	40.0											A
V_F	Maximum Instantaneous Forward Voltage at 2.0A	0.55			0.70		0.85				0.95		V
I_R	Max. DC reverse currentat T_A=25°C	0.5					0.1						mA
	rated DC blocking voltage T_A=100°C	10.0					5.0						
C_J	Typical Junction Capacitance	220			80								pF
T_J	Operating Junction Temperature Range	-55 to +125					-55 to +150						°C
T_{STG}	Storage Temperature Range	-55 to +150											°C
$R_{\theta JA}$	Thermal Resistance(1)	70											°C/W
$R_{\theta JL}$		20											

Note:(1)Thermal resistance between junction and ambient and between junction and lead mounted on P.C.B with 3mm*3mm copper pad areas.

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DSS22-DSS220

Schottky Barrier Diode

Typical Performance Characteristics(T_J = 25 °C, unless otherwise noted)

Figure 1: Forward Current Derating Curve

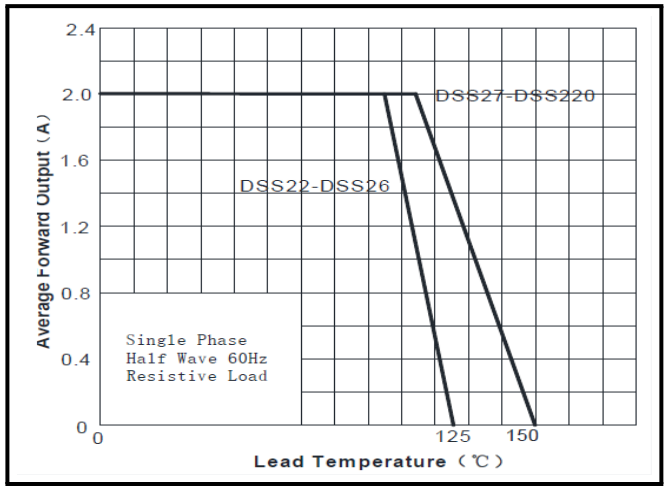


Figure 2: Surge Forward Current Capability

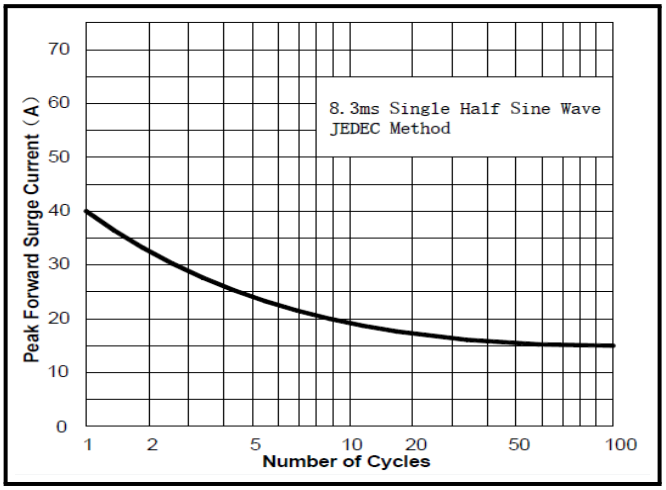


Figure 3: Forward Voltage

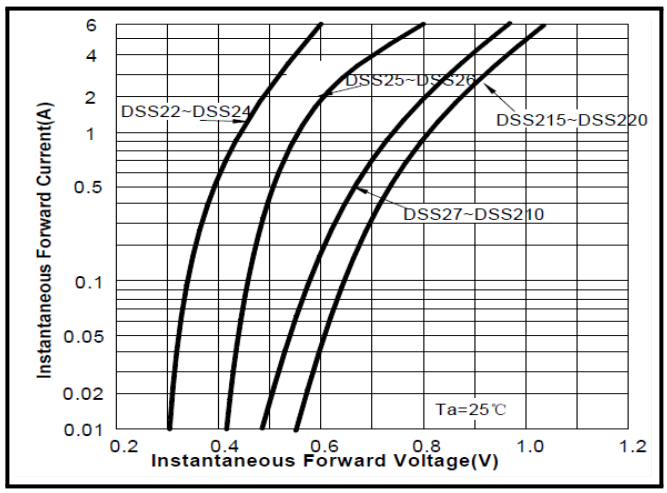
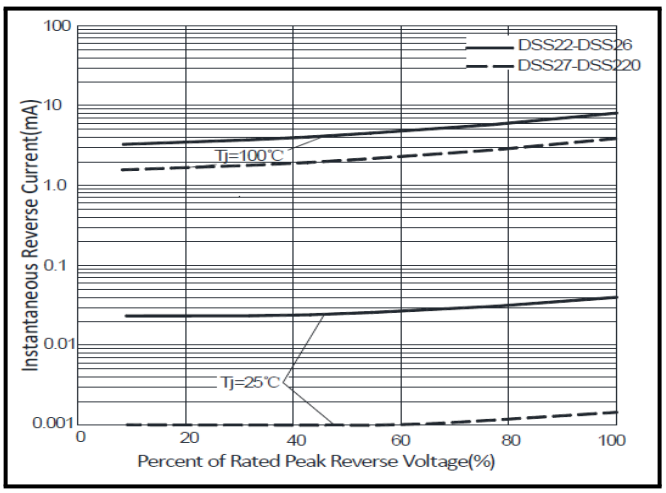


Figure 4: Typical Reverse Characteristics



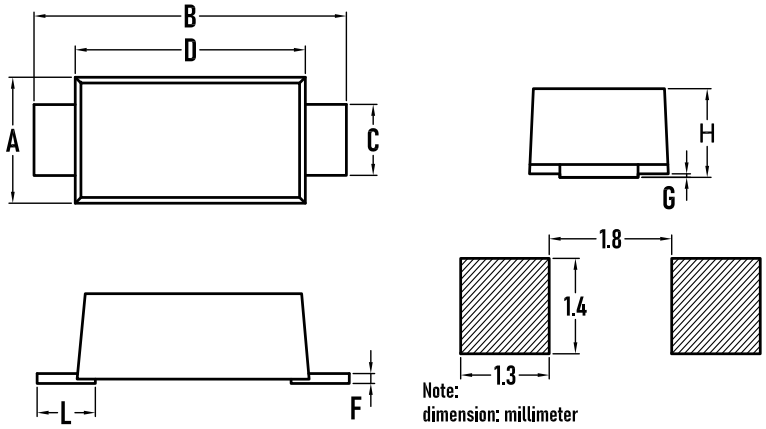
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DSS22-DSS220

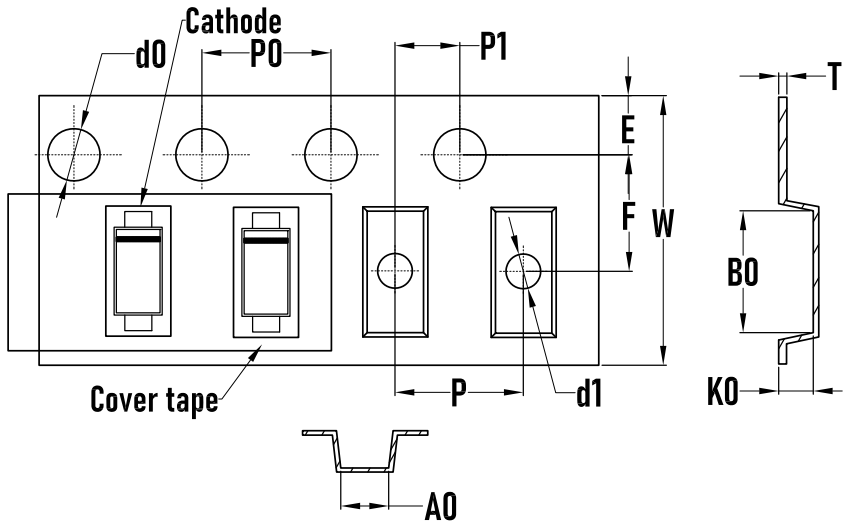
Schottky Barrier Diode

Package Mechanical Data - SOD-123FL



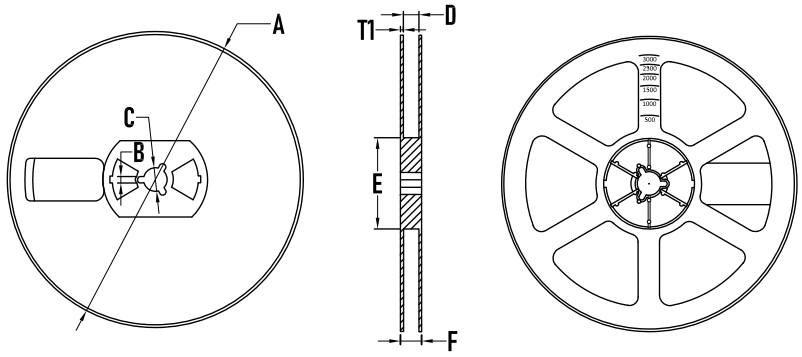
SYMBOL	MILLIMETER		
	MIN.	Typ.	MAX.
A	1.50	1.75	2.00
B	3.40	3.65	3.90
C	0.70	0.95	1.20
D	2.50	2.70	2.90
F	0.05	0.15	0.26
G	0.00	–	0.10
H	0.95	1.15	1.35
L	0.35	0.63	0.90

Packaging Tape - SOD-123FL



SYMBOL	MILLIMETER
A0	2.10±0.1
B0	4.0 ±0.1
d0	1.5±0.1
d1	1.0±0.1
E	1.75±0.1
F	3.50±0.1
K0	1.25±0.1
P	4.00±0.1
P0	4.00±0.1
P1	2.00±0.1
W	8.00±0.1
T	0.2±0.02

Packaging Reel



SYMBOL	MILLIMETER
A	177.8±0.2
B	2.7±0.2
C	13.5±0.2
D	9.6±0.3
E	54.5±0.2
F	12.3±0.3
T1	1.0±0.2
Quantity	3000PCS

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