Schottky Barrier Rectifiers

1 General Description

1.1 Features

- Glass passivated
- Metal to silicon rectifier, majority carrier conduction.
- Low profile package
- Low power loss ,high efficiency
- High surge capacity
- High current capability ,Low forward voltage drop

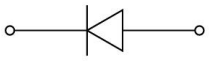
REVERSE VOLTAGE
20-200V
FORWARD CURRENT
2Ampere

1.2 Typical Applications

- For use in low voltage ,high frequency inverters, free wheeling,and polarity protection applications

1.3 Mechanical Data

- Case:SOD-123FL, molded plastic body
- Terminals: solder plated ,solderable per MIL-STD-750,method 2026
- Polarity: color band denotes cathode end



2 Maximum Ratings(TA=25℃ Unless otherwise specified)

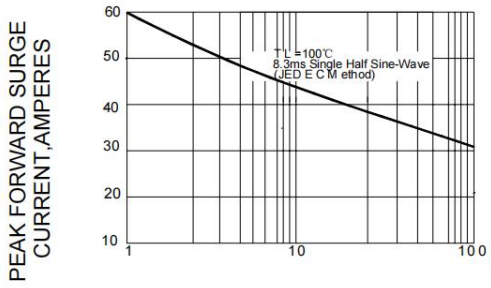
PARAMETER	SYMBOL	DSK22	DSK23	DSK24	DSK25	DSK26	DSK28	DSK210	DSK215	DSK220	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	80	100	150	200	V
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	56	70	100	125	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	80	100	150	200	V
Maximum Average Forward Rectified Current at TL=100℃	$I_{F(AV)}$	2.0									A
Non-Repetitive Peak forward surge current 8.3 ms single half sine-wave super imposed on rated load (JEDEC Method)	I_{FSM}	60.0									A
Operating Temperature Range	T_J	-55 to +150									℃
Storage Temperature Range	T_{STG}	-55 to +150									℃
Typical Thermal Resistance	$R_{\theta JL}$	15.0									°C/W

3 Electrical Characteristics(TA=25℃ Unless otherwise specified)

PARAMETER		SYMBOL	DSK22	DSK23	DSK24	DSK25	DSK26	DSK28	DSK210	DSK215	DSK220	UNIT
Maximum instantaneous Forward Voltage at 2.0A DC		V_F	0.55			0.7		0.85		0.92	0.95	V
Typical junction capacitance		C_j	200									pF
Reverse Current at Rated DC Blocking Voltage	Tj =25℃	I_R	1.0									mA
	Tj=100℃		20									

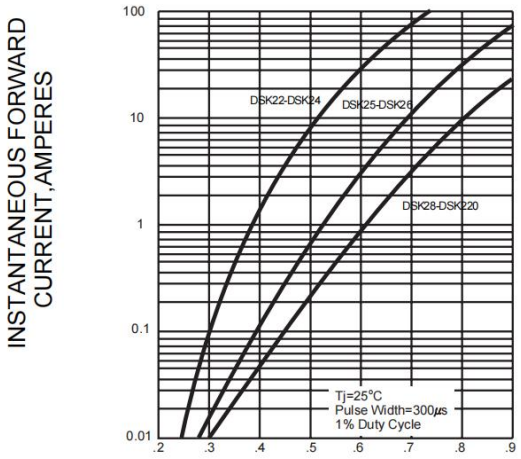
4 Characteristics Curves(TA=25℃ Unless otherwise specified)

FIG.1– PEAK FORWARD SURGE CURRENT



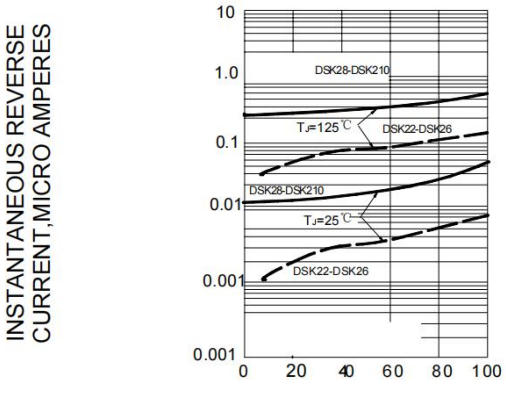
NUMBER OF CYCLES AT 60Hz

FIG 2 – TYPICAL FORWARD CHARACTERISTICS



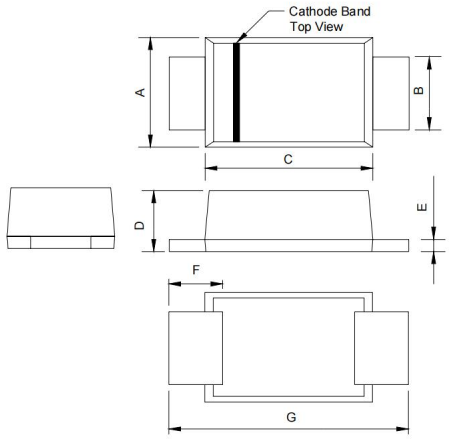
INSTANTANEOUS FORWARD VOLTAGE,VOLTS

FIG 3 TYPICAL REVERSE CHARACTERISTICS



PERCENT OF RATED PEAK REVERSE VOLTAGE,%

5 Package Outline Dimensions



Symbol	Millimeters	
	Min	Max
A	1.70	1.90
B	0.60	1.00
C	2.70	2.90
D	1.15	1.45
E	0.10	0.30
F	0.35	0.85
G	3.50	3.90

6 Ordering Information

PACKAGE	UNIT WEIGHT (g)	REEL (pcs)	CARTON (pcs)
SOD-123FL	Approximate 0.04	3000	180000

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