

SOD-123FL Plastic-Encapsulate Diodes

DSK12 THRU DSK120 Schottky Rectifier Diodes



• Features

- $I_{F(AV)}$ 1A
- V_{RRM} 20V-200V
- High surge current capability
- Polarity: Color band denotes cathode



SOD-123FL

• MAXIMUM RATINGS ($T_C=25^\circ\text{C}$)

Item	Symbol	Unit	Test Conditions	DSK1								
				2	3	4	5	6	8	10	15	20
Repetitive Peak Reverse Voltage	V _{RRM}	V		20	30	40	50	60	80	100	150	200
MaximumRMS Voltage	V _{RMS}	V		14	21	28	35	42	56	70	105	140
Average Forward Current	I _{F(AV)}	A	60Hz Half-sine wave , Resistance load	1.0								
Surge(Non-repetitive)Forward Current	I _{FSM}	A	60Hz Half-sine wave , 1 cycle, Ta=25℃	30								
Junction Temperature	T _J	℃		-55~+125			-55~+150					
Storage Temperature	T _{STG}	℃		-55 ~ +150								

• ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$)

Item	Symbol	Unit	Test Condition		DSK1								
					2	3	4	5	6	8	10	15	20
Peak Forward Voltage	V _F	V	I _F =1.0A		0.55			0.70		0.85		0.95	
Peak Reverse Current	I _{RRM1}	mA	V _{RM} =V _{RRM}	T _a =25°C	0.5				0.1				
	T _a =100°C			10				5.0					
Thermal Resistance(Typical)	R _{θJ-A}	°C/ W	Between junction and ambient		68								
	Between junction and lead		10										
Juction Capacitance (Typical)	Cj	pF	Measured at 1MHZ and Applied Reverse Voltage of 4.0 V.D.C		40			30		26		20	

Notes:

Thermal resistance from junction to ambient and from junction to lead mounted on FR4 PCB double sided copper mini pad

• Ordering Information:

Part NO.	DSK12-DSK120
Marking	K1***
Packing Information	REEL TAPE
Basic ordering unit (pcs)	3000

• Typical Characteristics

FIG.1: FORWARD CURRENT DERATING CURVE

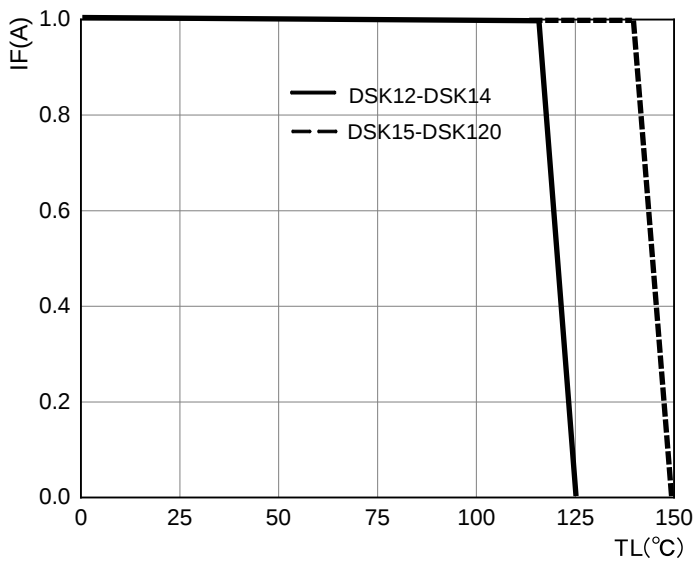
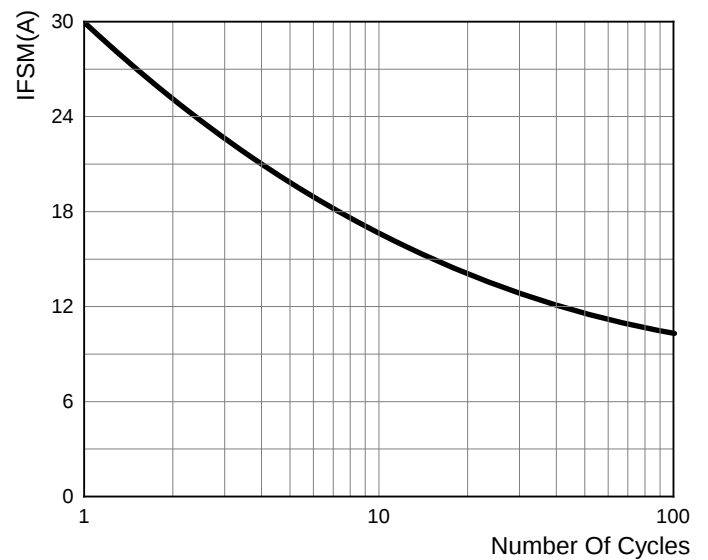
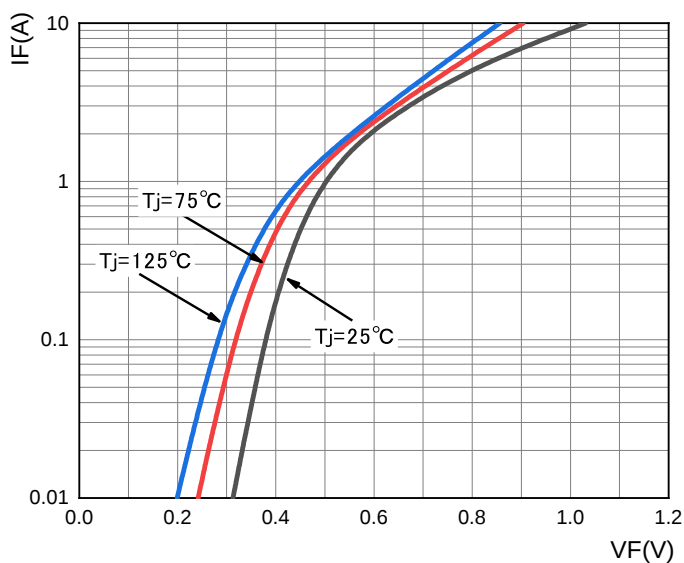


FIG 2: MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT



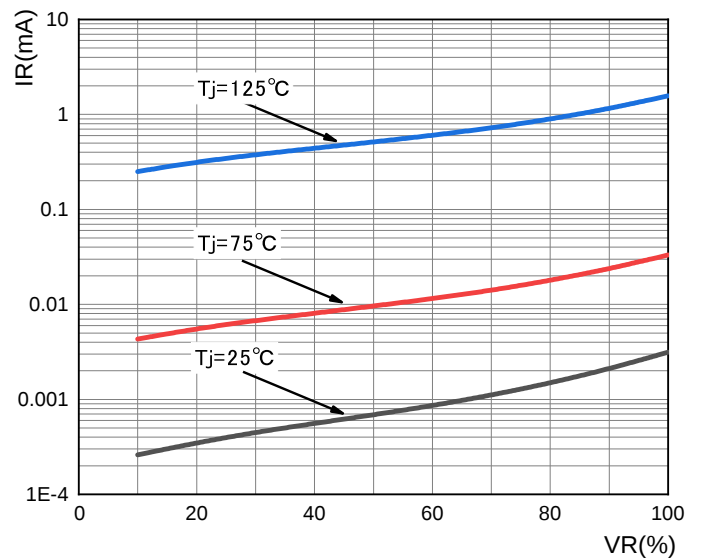
DSK12-SK14

FIG.3: TYPICAL FORWARD CHARACTERISTICS



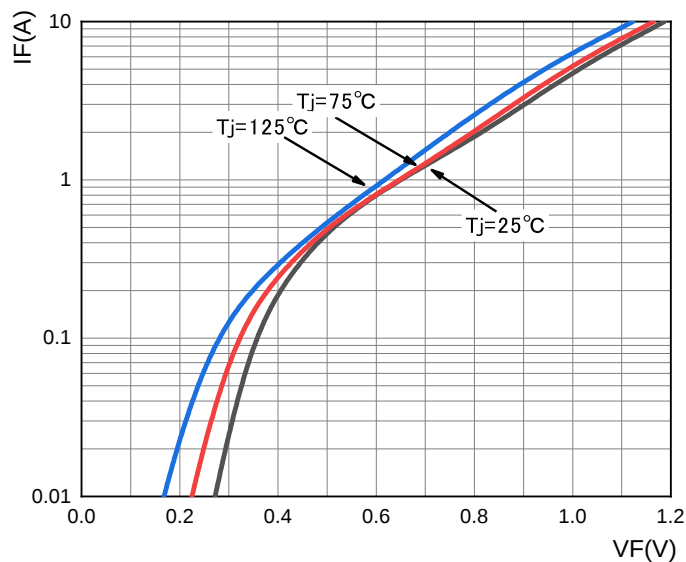
DSK12-SK14

FIG.4: TYPICAL REVERSE CHARACTERISTICS



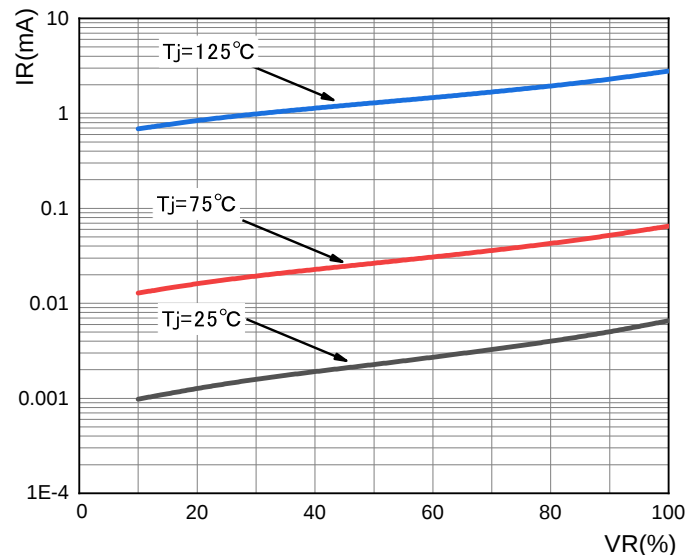
DSK15-DSK16

FIG.5: TYPICAL FORWARD CHARACTERISTICS



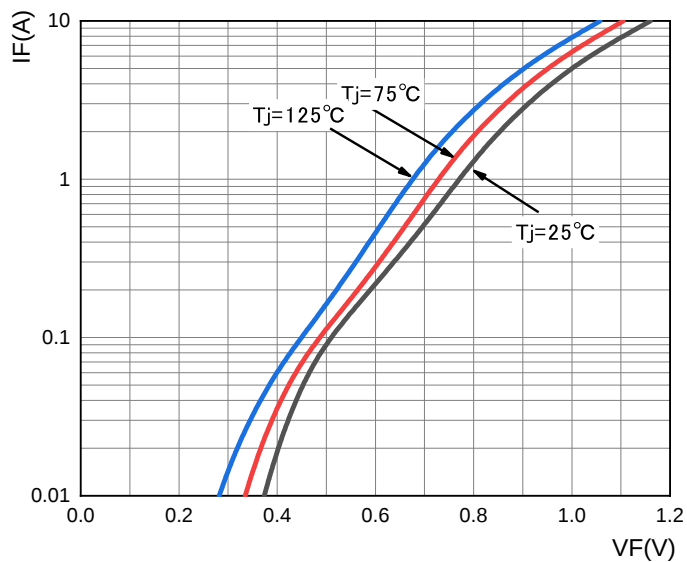
DSK15-DSK16

FIG.6: TYPICAL REVERSE CHARACTERISTICS



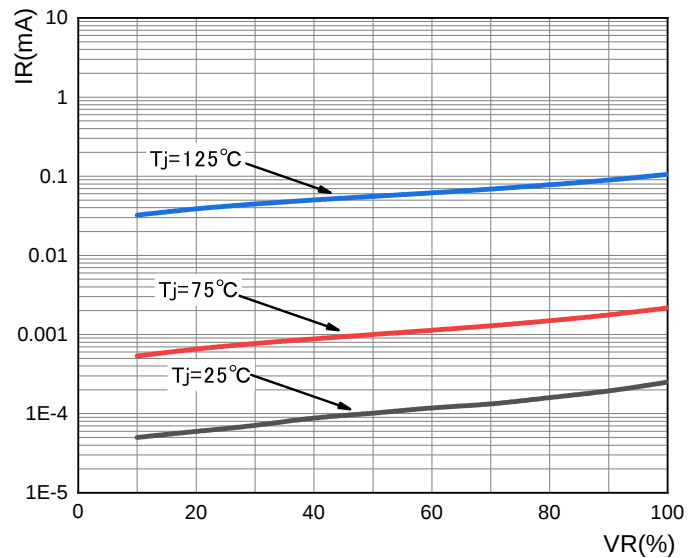
DSK18-DSK110

FIG.7: TYPICAL FORWARD CHARACTERISTICS



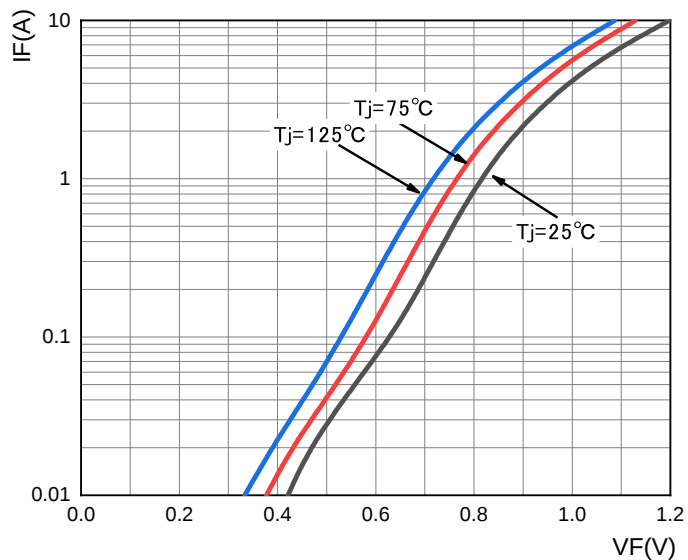
DSK18-DSK110

FIG.8: TYPICAL REVERSE CHARACTERISTICS



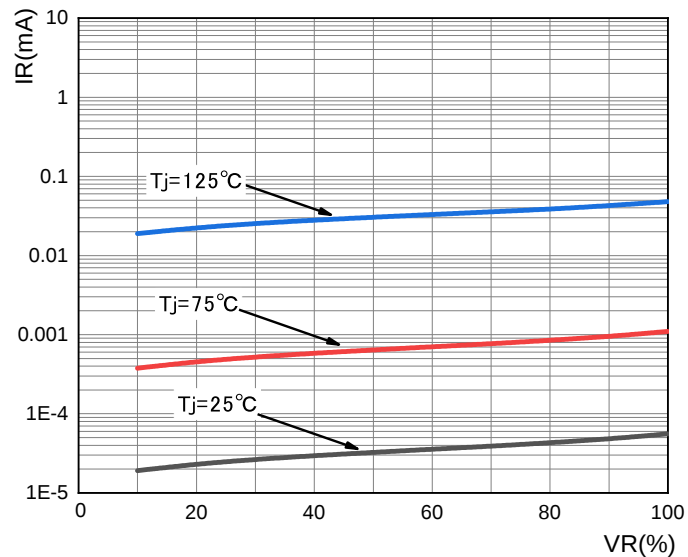
DSK115

FIG.9: TYPICAL FORWARD CHARACTERISTICS



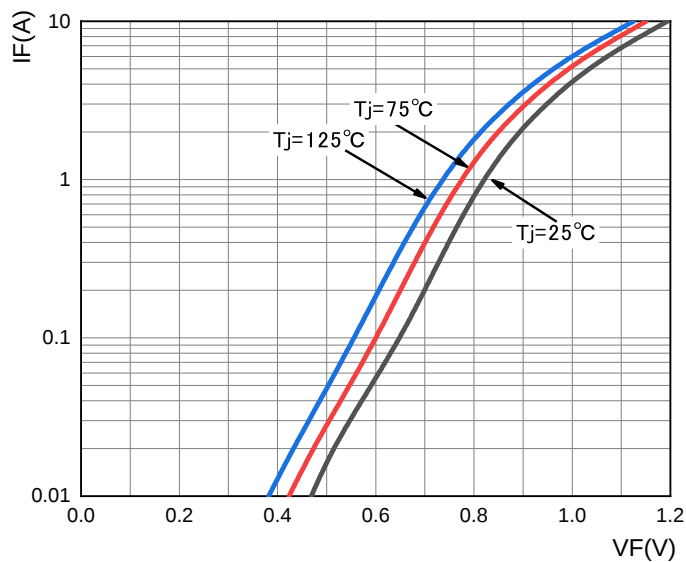
DSK115

FIG.10: TYPICAL REVERSE CHARACTERISTICS



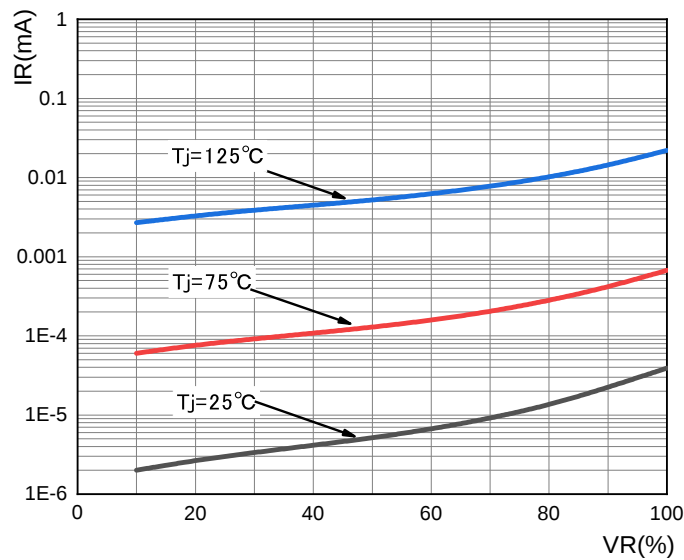
DSK120

FIG.11: TYPICAL FORWARD CHARACTERISTICS

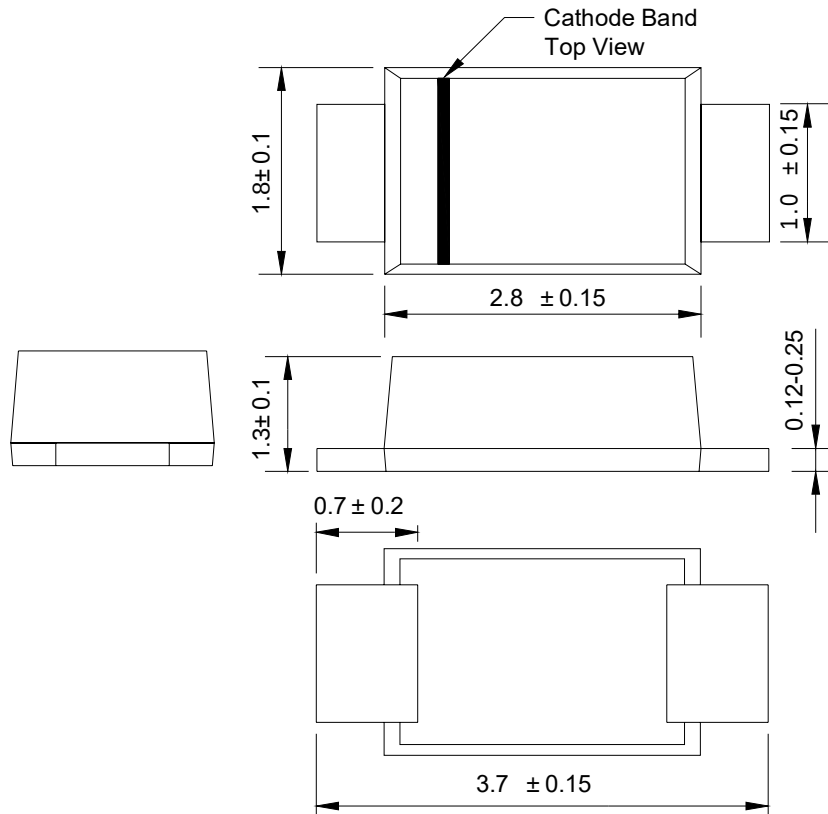


DSK120

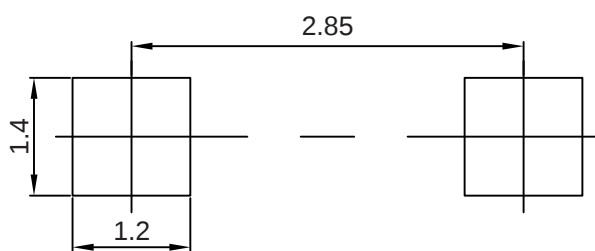
FIG.12: TYPICAL REVERSE CHARACTERISTICS



SOD-123FL Package Outline Dimensions



Dimensions in millimeters



Note:

1. Controlling dimension: in millimeters.
2. General tolerance: $\pm 0.05\text{mm}$.
3. The pad layout is for reference purposes only.