

DSK22 THRU DSK220

2.0A Surface Mount Schottky Barrier Rectifiers - 20V-200V

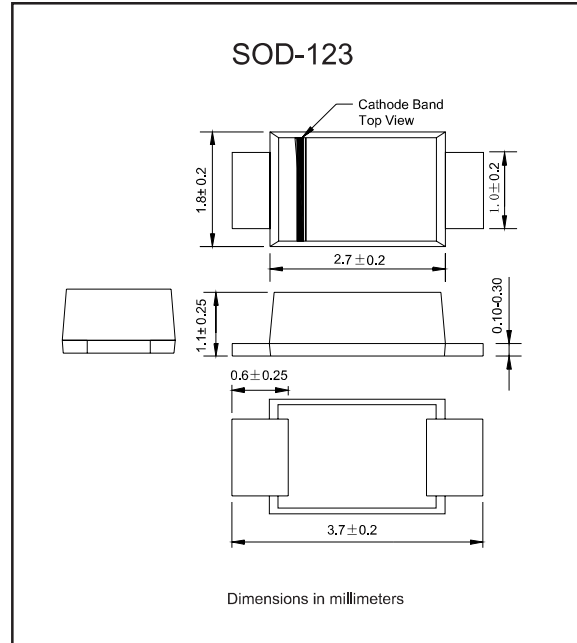
Features

- ▶ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ▶ Metal silicon junction, majority carrier conduction
- ▶ Low power loss, high efficiency
- ▶ High forward surge current capability
- ▶ High temperature soldering guaranteed:
250°C/10 seconds, 0.375" (9.5mm) lead length, 5 lbs. (2.3kg) tension
- ▶ Compliant to RoHS Directive 2011/65/EU
- ▶ Compliant to Halogen-free

Mechanical data

- ▶ **Case**: JEDEC SOD-123 molded plastic body
- ▶ **Terminals**: Plated axial leads, solderable per MIL-STD-750, Method 2026
- ▶ **Polarity**: Color band denotes cathode end
- ▶ **Mounting Position**: Any

Package outline



Maximum ratings and Electrical Characteristics (AT $T_A=25^\circ\text{C}$ unless otherwise noted)

PARAMETER	CONDITIONS	Symbol	MIN.	TYP.	MAX.	UNIT
Forward rectified current	See Fig.2	I_O			2.0	A
Forward surge current	8.3ms single half sine-wave (JEDEC methode)	I_{FSM}			40	A
Reverse current	$V_R = V_{RRM} T_A = 25^\circ\text{C}$	I_R			0.5	mA
	$V_R = V_{RRM} T_A = 100^\circ\text{C}$				10	
Thermal resistance	Junction to ambient NOTE 1	$R_{\theta JA}$		88		$^\circ\text{C}/\text{W}$
Diode junction capacitance	f=1MHz and applied 4V DC reverse voltage	C_J		220		pF
Storage temperature		T_{STG}	-65		+150	$^\circ\text{C}$

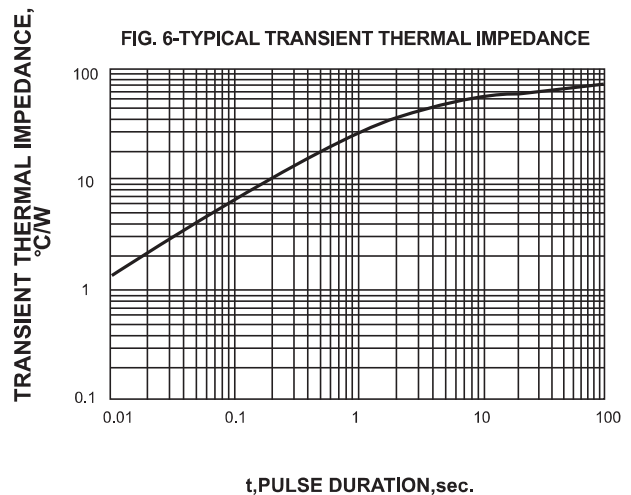
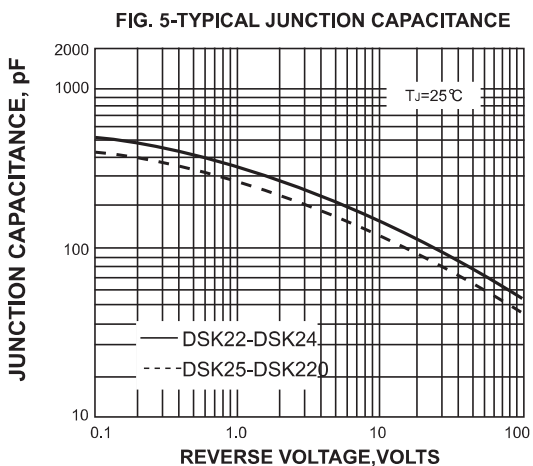
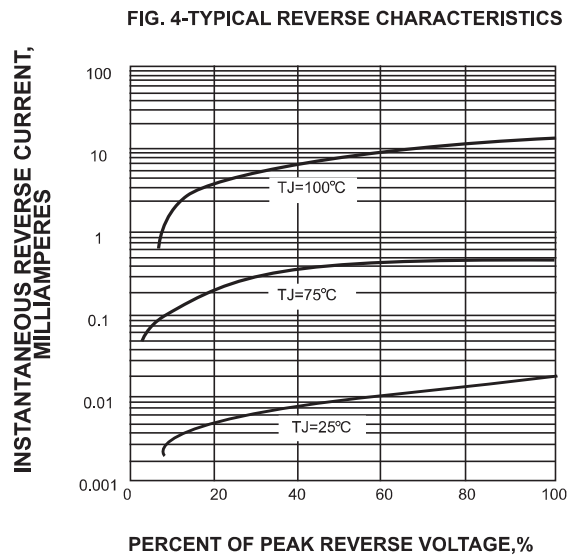
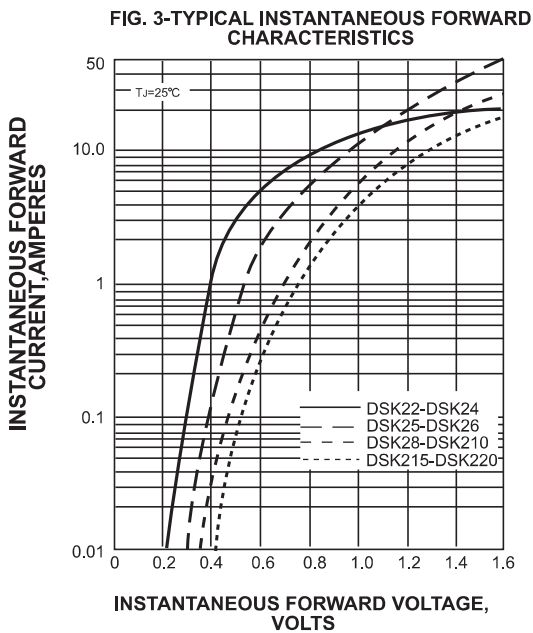
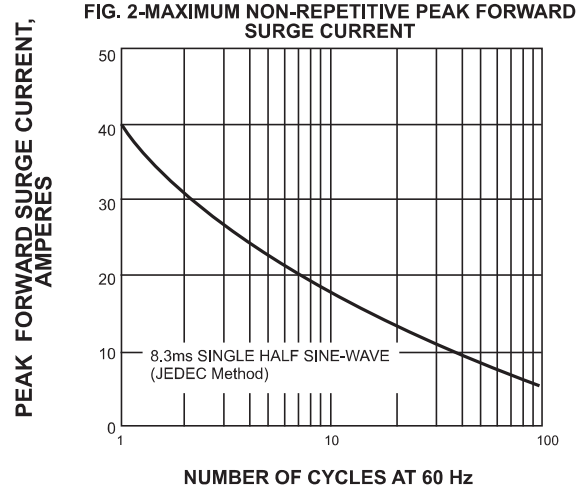
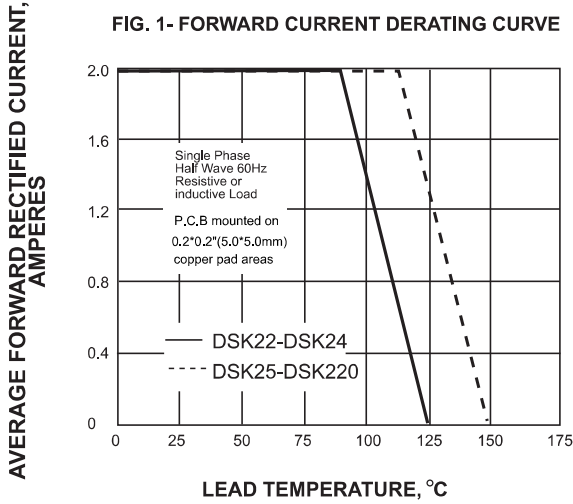
Note: 1.P.C.B. mounted with 0.2x0.2" (5.0x5.0mm) copper pad areas

SYMBOLS	V_{RRM}^{*1} (V)	V_{RMS}^{*2} (V)	V_R^{*3} (V)	V_F^{*4} (V)	Operating temperature T_J , ($^\circ\text{C}$)
DSK22	20	14	20	0.55	-55 to +125
DSK23	30	21	30		
DSK24	40	28	40		
DSK25	50	35	50	0.70	-55 to +150
DSK26	60	42	60		
DSK28	80	56	80	0.85	
DSK210	100	70	100		
DSK215	150	105	150	0.92	
DSK220	200	140	200		

- *1 Repetitive peak reverse voltage
- *2 RMS voltage
- *3 Continuous reverse voltage
- *4 Maximum forward voltage@ $I_F=2.0\text{A}$



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Rating and characteristic curves



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Pinning information

Pin	Simplified outline	Symbol
Pin1 cathode Pin2 anode		

Marking

Type number	Marking code
DSK22	22
DSK23	23
DSK24	24
DSK25	25
DSK26	26
DSK28	28
DSK210	20
DSK215	215
DSK220	220

Suggested solder pad layout



Dimensions in inches and (millimeters)

PACKAGE	A	B	C
SOD-123	0.075 (1.90)	0.055 (1.40)	0.075 (1.90)