DSK32 THRU DSK320

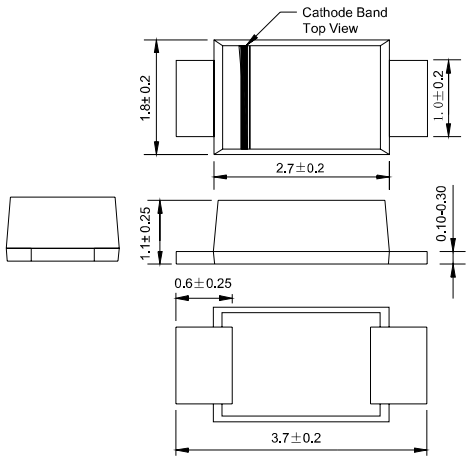
3.0A Surface Mount Schottky Barrier Rectifiers - 20V-200V

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℃/10 seconds,0.375″(9.5mm) lead length, 5 lbs. (2.3kg) tension
- Compliant to RoHS Directive 2011/65/EU
- Compliant to Halogen-free

Package outline

SOD-123



Dimensions in millimeters

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

Maximum ratings and Electrical Characteristics (AT T_A=25°C unless otherwise noted)

PARAMETER	CONDITIONS		Symbol	MIN.	TYP.	MAX.	UNIT
Forward rectified current	See Fig.1		I_O			3.0	A
Forward surge current	8.3ms single half sine-wave (JEDEC methode)		I_{FSM}			60	A
Reverse current	T_A = 25°C	V_R = 20V - 60V	I_R			0.5	mA
		V_R = 80V - 200V				0.1	
Reverse current	T_A = 100°C	V_R = 20V - 60V	I_R			10	mA
		V_R = 80V - 200V				5	
Thermal resistance	Junction to ambient NOTE 1		$R_{\theta JA}$		88		°C/W
Diode junction capacitance	f=1MHz and applied 4V DC reverse voltage		C_J		220		pF
Storage temperature			T_{STG}	-65		+150	°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, (°C)
DSK32	20	14	20	0.55	-55 to +125
DSK33	30	21	30		
DSK34	40	28	40		
DSK35	50	35	50	0.70	-55 to +150
DSK36	60	42	60		
DSK38	80	56	80	0.85	
DSK310	100	70	100		
DSK315	150	105	150	0.92	
DSK320	200	140	200		

*1 Repetitive peak reverse voltage

*2 RMS voltage

*3 Continuous reverse voltage

*4 Maximum forward voltage@I_F=3.0A

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Rating and characteristic curves (DSK32 THRU DSK320)

FIG. 1- FORWARD CURRENT DERATING CURVE

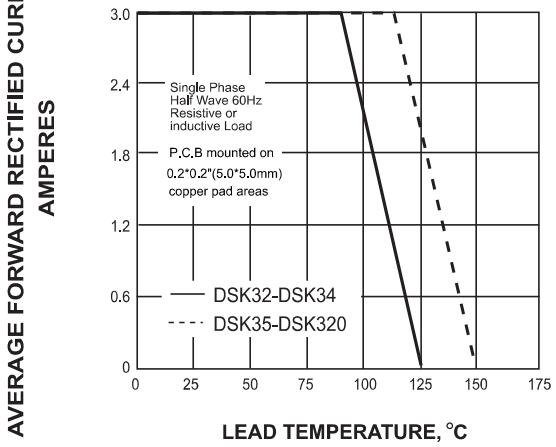


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

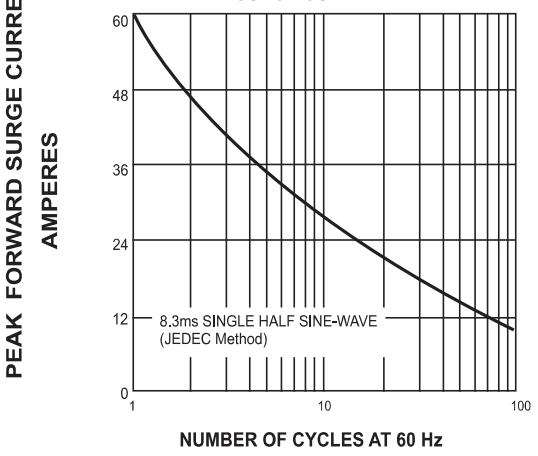


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

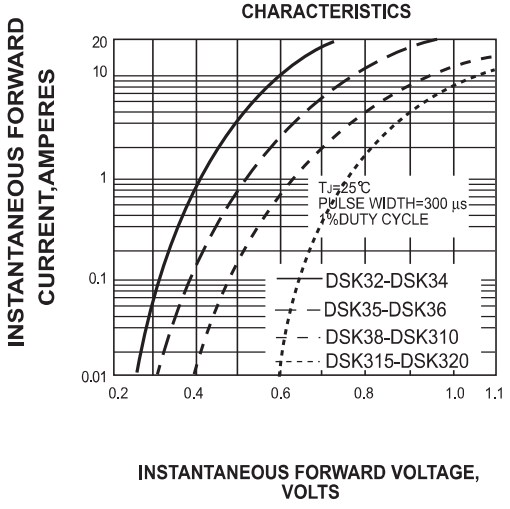


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

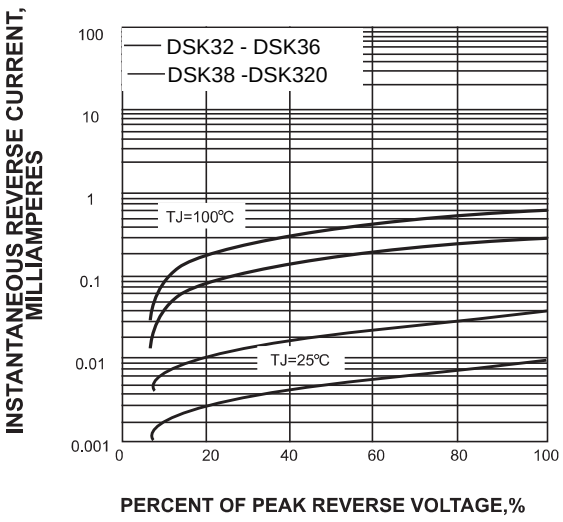
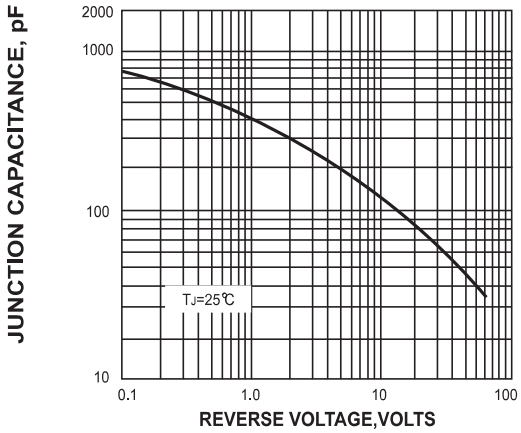


FIG. 5-TYPICAL JUNCTION CAPACITANCE

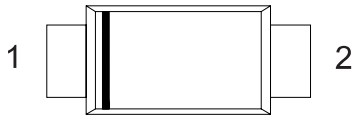


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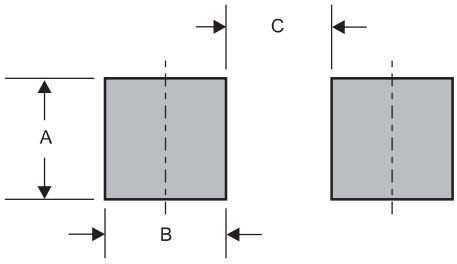
Pinning information

Pin	Simplified outline	Symbol
Pin1 cathode Pin2 anode		

Marking

Type number	Marking code
DSK32	32
DSK33	33
DSK34	34
DSK35	35
DSK36	36
DSK38	38
DSK310	30
DSK315	315
DSK320	320

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)