

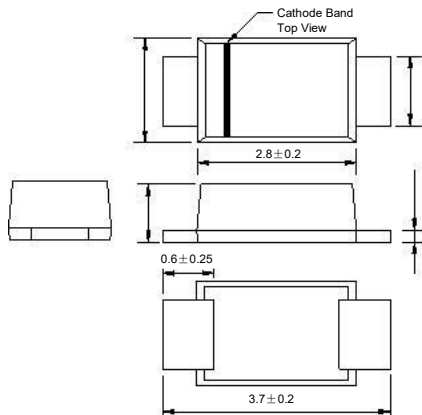
DSR1A THRU DSR1M



SURFACE MOUNT GENERAL PURPOSE SILICON RECTIFIER

Reverse Voltage - 50 to 1000 Volts Forward Current - 1.0 Ampere

SOD-123FL



Dimensions in millimeters

FEATURES

- Glass passivated device
- Ideal for surface mounted applications
- Low reverse leakage
- Metallurgically bonded construction
- High temperature soldering guaranteed:
250°C/10 seconds, 0.375" (9.5mm) lead length,
5 lbs. (2.3kg) tension

MECHANICAL DATA

Case: JEDEC SOD-123FL molded plastic body over passivated chip

Terminals: Solderable per MIL-STD-750, Method 2026

Polarity: Color band denotes cathode end

Mounting Position: Any

Weight: 0.0007 ounce, 0.02 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

	SYMBOLS	DSR1A	DSR1B	DSR1D	DSR1G	DSR1J	DSR1K	DSR1M	UNITS
		S1A	S1B	S1D	S1G	S1J	S1K	S1M	
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	VOLTS
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	VOLTS
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	VOLTS
Maximum average forward rectified current A=65°C (NOTE 1)	$I_{(AV)}$				1.0				Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) T=25°C	I_{FSM}				25.0				Amps
Maximum instantaneous forward voltage at 1.0A	V_F				1.1				Volts
Maximum DC reverse current T _A =25°C A=125°C	I_R				10.0 50.0				μA
	C_J				4				pF
	$R_{\theta JA}$				180				K/W
	T _J , T _{STG}				-55 to +150				°C

Note: 1. Averaged over any 20ms period.

2. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

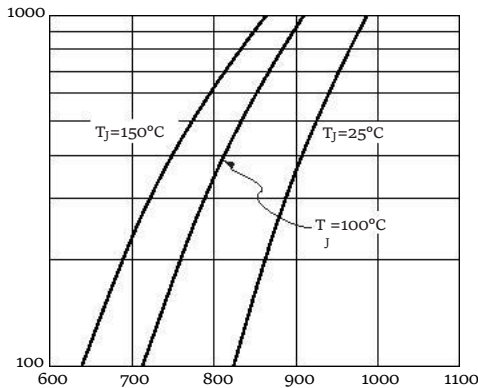
3. Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted

<http://www.comonsemi.com>

<http://www.ndone.cn>

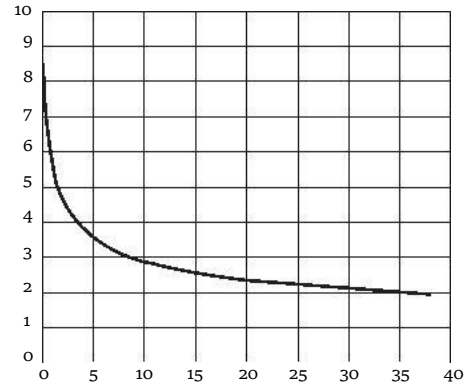
RATINGS AND CHARACTERISTIC CURVES DSR1A THRU DSR1M

FIG.1 --TYPICAL FORWARD CHARACTERISTIC



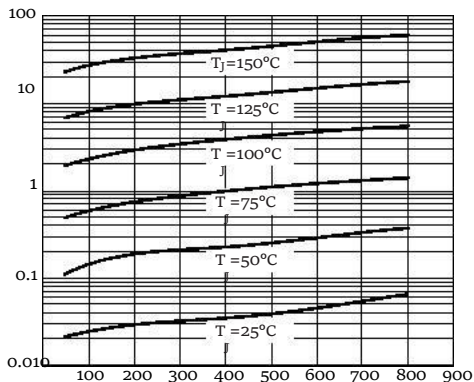
INSTANTANEOUS FORWARD VOLTAGE,mV

FIG.2 -- TYPICAL JUNCTION CAPACITANCE



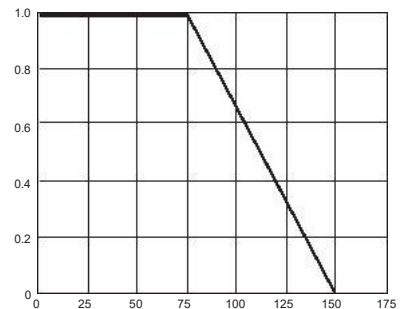
REVERSE VOLTAGE,VOLTS

FIG.3 -- TYPICAL INSTANTANEOUS REVERSE CHARACTERISTICS



INSTANTANEOUS REVERSE VOLTAGE,V

FIG.4 -- FORWARD DERATING CURVE



AMBIENT TEMPERATURE,