



SD820CS~SD8100CS

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

Voltage Range 20 to 100 Volts

Current 8 Amperes

Features

- * For surface mounted applications
- * Low power loss, High efficiency
- * Built-in strain relief
- * Easy pick and place
- * High surge capacity
- * Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- * For use in low voltage high frequency inverters, free wheeling, and
- * polarity protection applications

Both normal and Pb free product are available :

Normal : 80~95% Sn, 5~20% Pb

Pb free: 98.5% Sn above

Mechanical Data

Case: D PAK/TO-252 molded plastic

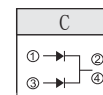
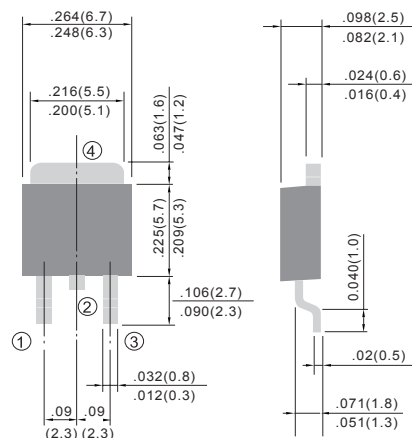
Terminals: Solder plated, solderable per MIL-STD-750, Method 2026

Polarity: Color band denotes cathode

Standard packaging: 16mm tape (EIA-481)

Weight: 0.015 ounce, 0.4 gram.

TO-252 / DPAK



Dimensions in millimeters

Maximum Ratings And Electrical Characteristics

Ratings at 25 °C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load For capacitive load, derate current by 20%

PARAMETER	SYMBOL	SD820 CS	SD830 CS	SD840 CS	SD860 CS	SD880 CS	SD8100 CS	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	20	30	40	60	80	100	V
Maximum RMS Voltage	V _{RMS}	14	21	28	42	56	70	V
Maximum DC Blocking Voltage	V _{DC}	20	30	40	60	80	100	V
Maximum Average Forward Rectified Current .at Tc =85 °C	I _{AV}	8						A
Peak Forward Surge Current :8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I _{FSM}	85						A
Maximum Instantaneous Forward Voltage at 4.0A (Note 1)	V _F	0.55			0.75	0.85		V
Maximum DC Reverse Current TC=25 °C at Rated DC Blocking Voltage TC=100 °C	I _R	0.2 20						mA
Maximum Thermal Resistance	R _{θJC} R _{θJA}	3.0 80						°C / W
Operating Junction and Storage Temperature Range	T _J , T _{STG}	-50 TO +125						°C



SD820CS~SD8100CS

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

Voltage Range 20 to 100 Volts

Current 8 Amperes

Rating and Characteristic Curves

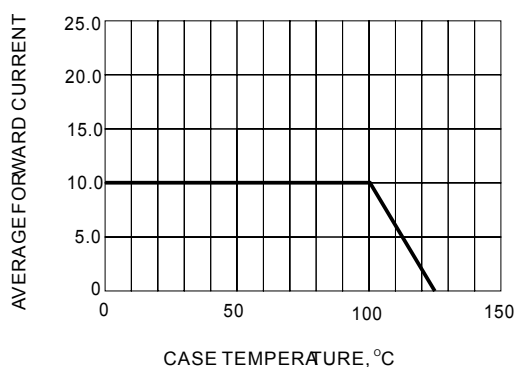


Fig.1- FORWARD CURRENT DERATING CURVE

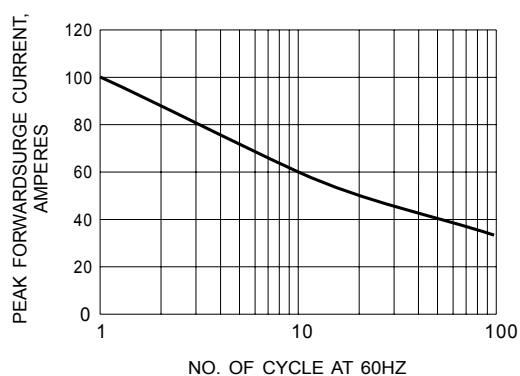


Fig.2-MAXIMUMNON-REPETITIVEPEAK FORWARD SURGE CURRENT

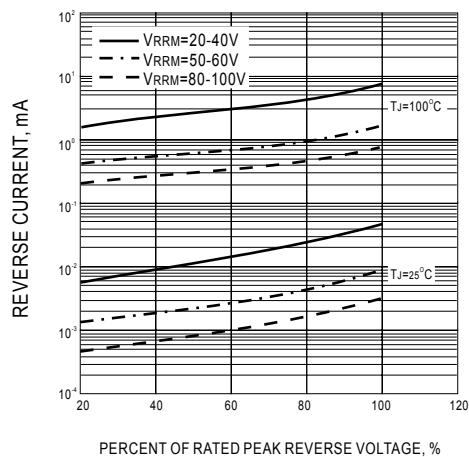


Fig.3- TYPICAL REVERSE CHARACTERISTIC

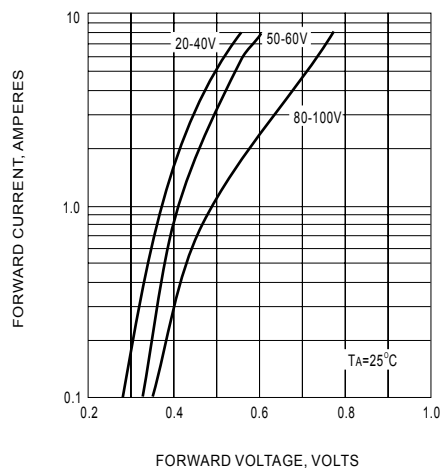


Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC