

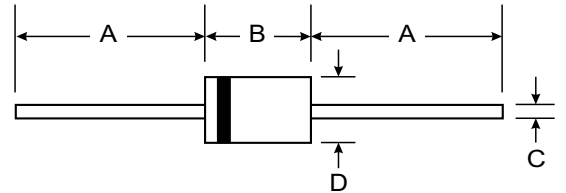
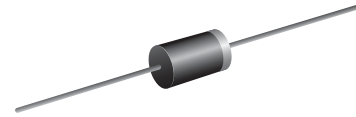
VOLTAGE RANGE: 30 - 100V
CURRENT: 8.0 A

Features

- Metal of silicon rectifier , majority carrier conduction
- Guard ring for transient protection
- Low power loss,high efficiency
- Highcurrent capability,lowVF
- High surge capacity
- Plastic package has UL flammability classification 94V-0

Mechanical Data

- Case: DO-201AD, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 1.2 grams (approx.)
- Mounting Position: Any
- Marking: 8SQ030...8SQ100



DO-201AD		
Dim	Min	Max
A	25.40	—
B	7.20	9.50
C	1.20	1.30
D	4.80	5.30
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics T_A = 25°C unless otherwise specified

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

Characteristic	Symbol	80SQ030	80SQ035	80SQ040	80SQ045	80SQ050	80SQ060	80SQ080	80SQ100	Unit	
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	30	35	40	45	50	60	80	100	V	
Maximum RMS Voltage	V _{RMS}	21	24.5	28	31.5	35	42	56	70	V	
Maximum DC Blocking Voltage	V _{DC}	30	35	40	45	50	60	80	100	V	
Maximum Average Forward Rectified Current@T _c =95 °C	I _(AV)	8.0								A	
Peak Forward Surge Current 8.3ms single half sine-wave super imposed on rated load(JEDEC Method)	I _{FSM}	380								A	
Peak Forward Voltage at 8.0ADC(Note1)	V _F	0.55				0.7		0.8		V	
Maximum DC Reverse Current @T _j =25°C at Rated DC Bolcking Voltage @T _j =100°C	I _R	0.5					50				mA
Tyical Junction Capacitance (Note2)	C _J	900									PF
Tyical Thermal Resistance (Note3)	R _{θJC}	8.0									°C/w
Operating Temperature Range	T _J	-55 to+150									°C
Storage Temperature Range	T _{STG}	-55 to+150									°C

NOTES:1.300us Pulse Width, 2%Dudy Cycle.
 2.Measured at 1.0 MHZ and applied reverse voltage of 4.0VDC.
 3.Thermal Resistance Junction to Case.

FIG.1-FORWARD CURRENT DERATING CURVE

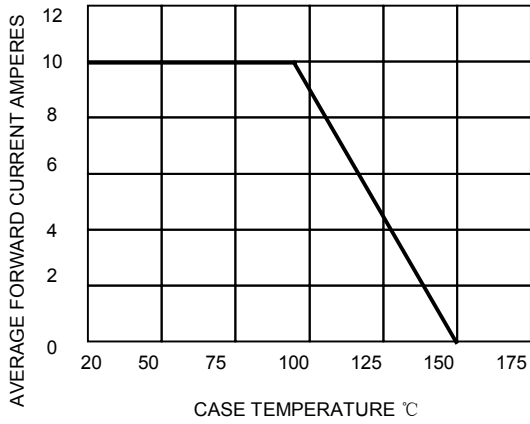


FIG.2-MAXIMUM NON-REPETITIVE SURGE

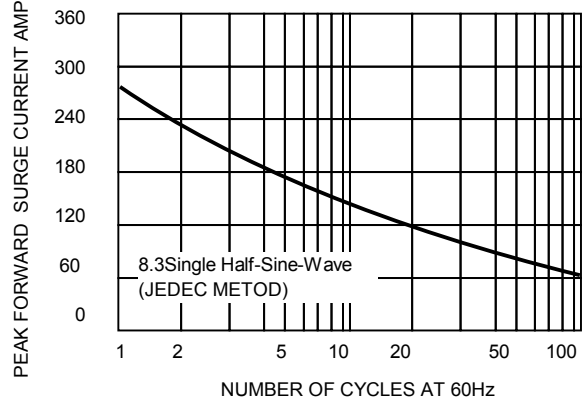


FIG.3-TYPICAL REVERSE CHARACTERISTICS

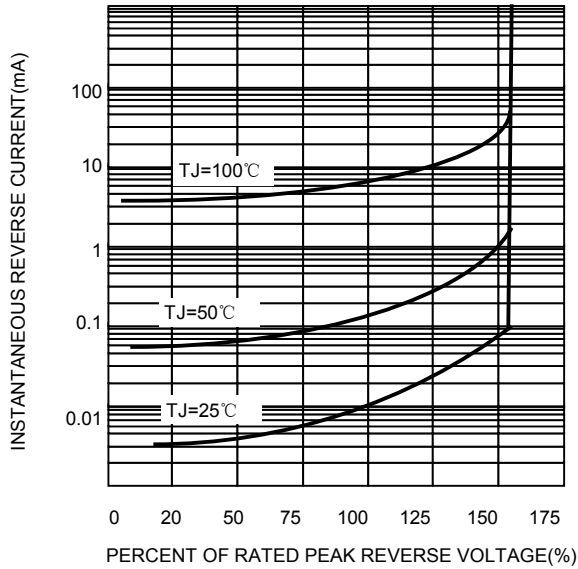


FIG.4-TYPICAL FORWARD CHARACTERISTICS

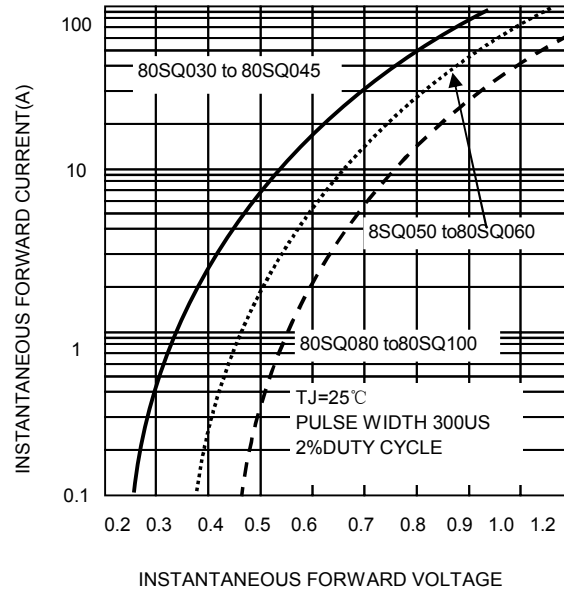


FIG.5-TYPICAL JUNCTION CAPACITANCE

