

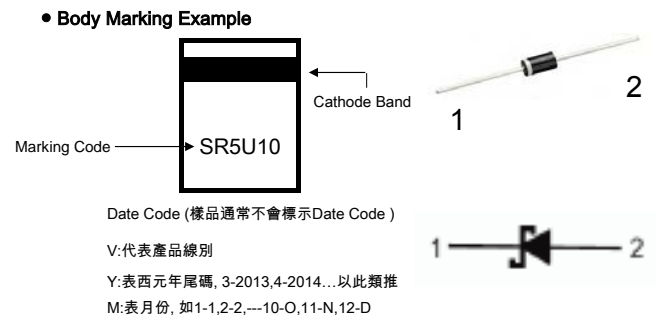


PRIMARY CHARACTERISTICS	
V_{RRM}	100V
I_{FSM}	150A
$V_F@5A, T_J=125^{\circ}C$	0.50V
I_O	5A
$T_J \text{ Max}$	150°C

FEATURES

- EXTREMELY LOW VF
- TRENCH MOS SCHOTTKY TECHNOLOGY
- LOW POWER LOSS / HIGH EFFICIENCY
- HIGH FREQUENCY OPERATION
- HIGH FORWARD SURGE CAPABILITY
- MOISTURE SENSITIVITY LEVEL 1

DO-201AD PACKAGE



MECHANICAL DATA

- CASE : TRANSFER MOLDED
- POLARITY : AS MARKED
- TERMINALS : PURETIN PLATED
- LEADS : SOLDERABLE PER MIL-STD-202, METHOD 208

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

RATINGS	SYMBOL	SR5U10	UNIT
Marking Code		SR5U10	
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	100	Volts
Maximum RMS Voltage	V_{RMS}	70	Volts
Maximum DC Blocking Voltage	V_{DC}	100	Volts
Maximum Average Forward Rectified Current	I_O	5.0	Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	150	Amps
Typical Thermal Resistance (Note 1)	$R_{\theta Ja}$	25	°C/W
Operating Temperature Range	T_J	-55 to +150	°C
Storage Temperature Range	T_{STG}	-55 to +175	°C

CHARACTERISTICS	SYMBOL	SR5U10	UNIT
Maximum Forward Voltage (Note 2) $I_F=5A@ T_J=25^{\circ}C$ $I_F=5A@ T_J=125^{\circ}C$	V_F	0.60 0.55	Volts
Maximum Average Reverse Current at Rated DC Blocking Voltage	@ $T_J = 25^{\circ}C$	0.05	mAmps
	@ $T_J = 125^{\circ}C$	15	

NOTES :1. BOTH LEADS ATTACHED TO HEATSINK AT LEAD LENGTH 5mm
2. PULSE TEST: 300µs PULSE WIDTH, 1% DUTY CYCLE.

RATINGS AND CHARACTERISTIC CURVES OF SR5U10

FIG. 1-FORWARD CURRENT DERATING CURVE

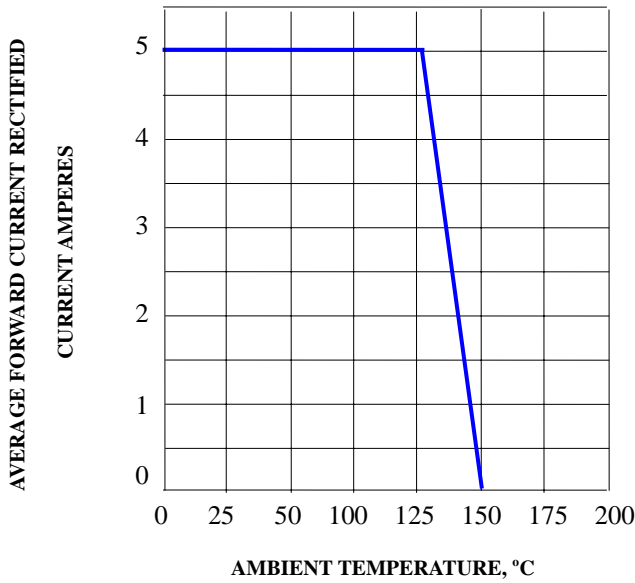


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE RATING

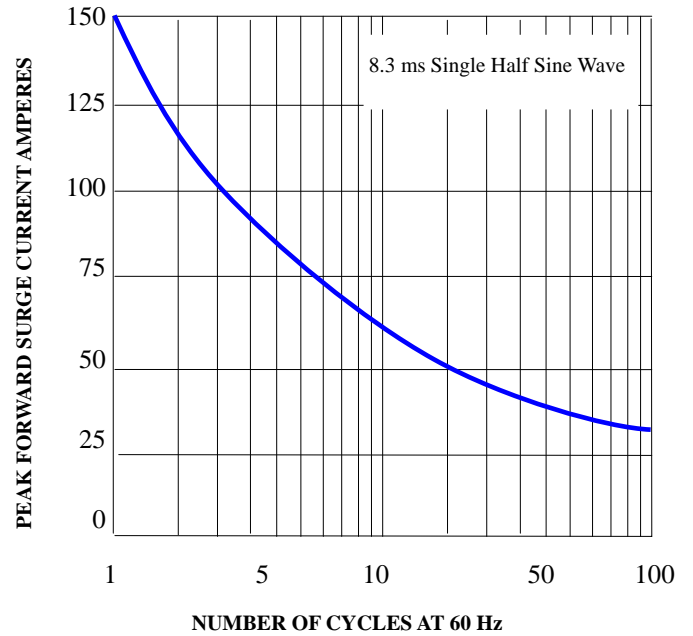


FIG. 3- TYPICAL REVERSE CHARACTERISTICS

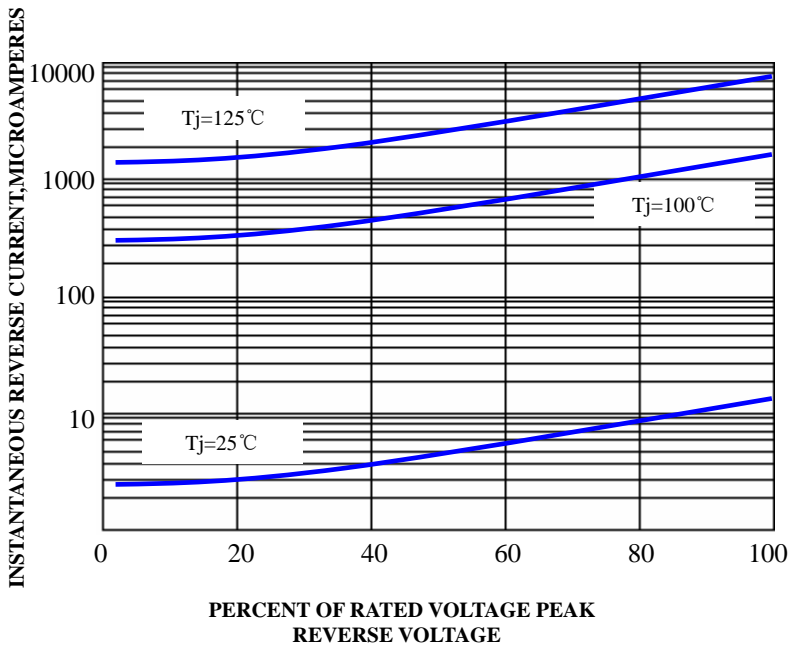
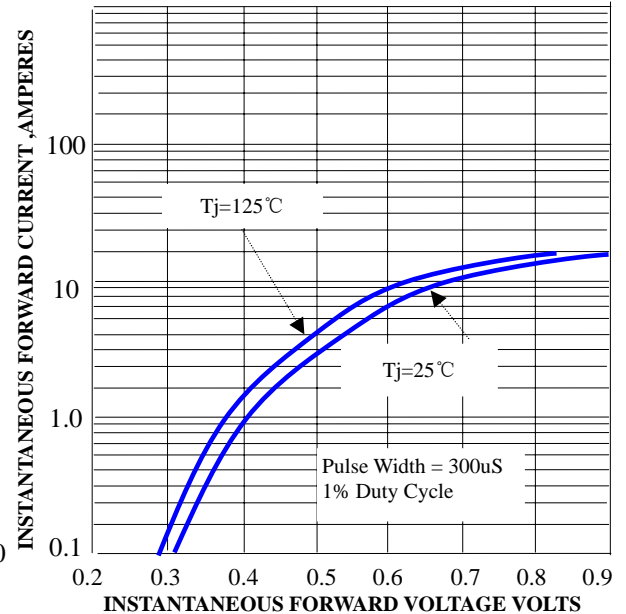
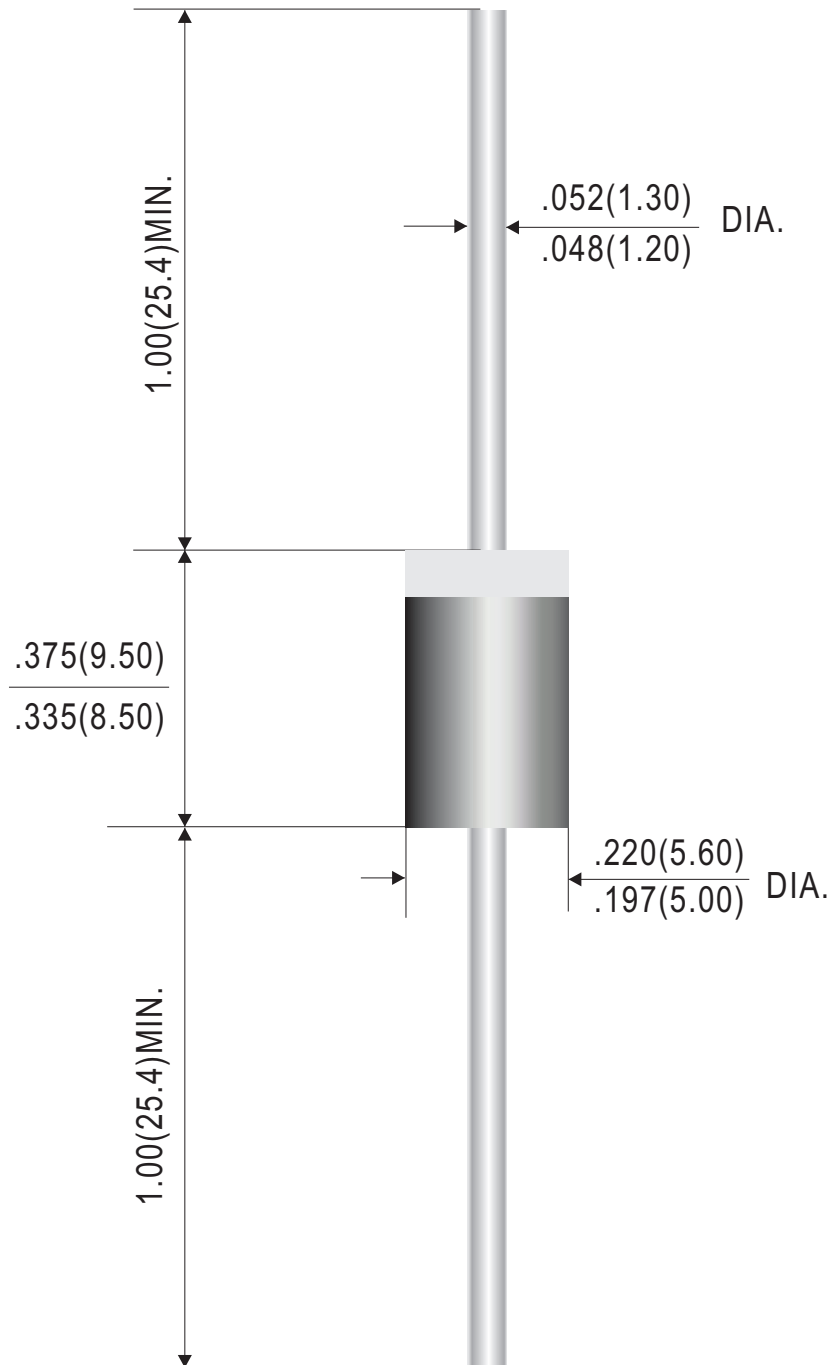


FIG. 4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



Outline Drawing

DO-201AD



Dimensions in inches and (millimeters)

Rev.B