



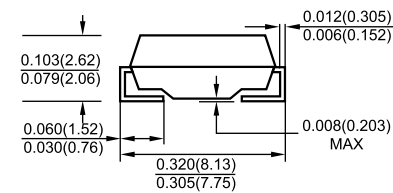
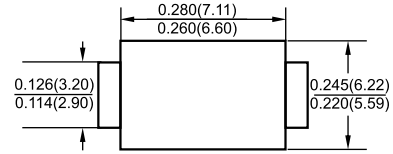
SMC/DO-214AB

Features

- ✧ Low cost
- ✧ Glass passivated chip junction
- ✧ Low forward voltage drop
- ✧ High current capability
- ✧ Easily cleaned with alcohol, Isopropanol and similar solvents
- ✧ The plastic material carries U/L recognition 94V-0

Mechanical Data

- ✧ Case: JEDEC SMC, molded plastic
- ✧ Polarity: Color band denotes cathode
- ✧ Weight: 0.007 ounces, 0.21 grams
- ✧ Mounting position: Any



Dimensions in inches and (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 by 20%.

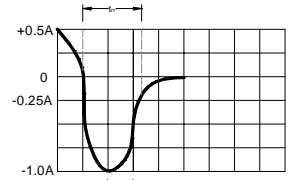
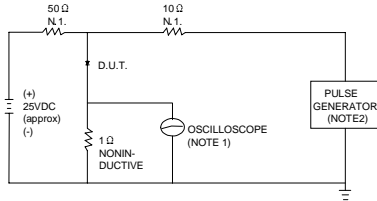
		MURS 405	MURS 410	MURS 415	MURS 420	MURS 430	MURS 440	MURS 450	MURS 460	UNITS
Maximum recurrent peak reverse voltage	V_{RRM}	50	100	150	200	300	400	500	600	V
Maximum RMS voltage	V_{RMS}	35	70	105	140	210	280	350	420	V
Maximum DC blocking voltage	V_{DC}	50	100	150	200	300	400	500	600	V
Maximum average forward rectified current @ $T_A=75^\circ\text{C}$	$I_{F(AV)}$	4.0								A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load @ $T_J=125^\circ\text{C}$	I_{FSM}	125.0								A
Maximum instantaneous forward voltage @ 4.0A	V_F	0.89				1.28				V
Maximum reverse current @ $T_A=25^\circ\text{C}$ at rated DC blocking voltage @ $T_A=125^\circ\text{C}$	I_R	10.0				100.0				μA
Maximum reverse recovery time (Note1)	t_{rr}	25				50				ns
Typical junction capacitance (Note2)	C_J	95								pF
Typical thermal resistance (Note3)	$R_{\theta JA}$	20								$^\circ\text{C}/\text{W}$
Operating junction temperature range	T_J	- 55 ----- + 150								$^\circ\text{C}$
Storage temperature range	T_{STG}	- 55 ----- + 150								$^\circ\text{C}$

NOTE: 1. Measured with $I_F=0.5\text{A}$, $I_R=1\text{A}$, $t_{rr}=0.25\text{A}$.

2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

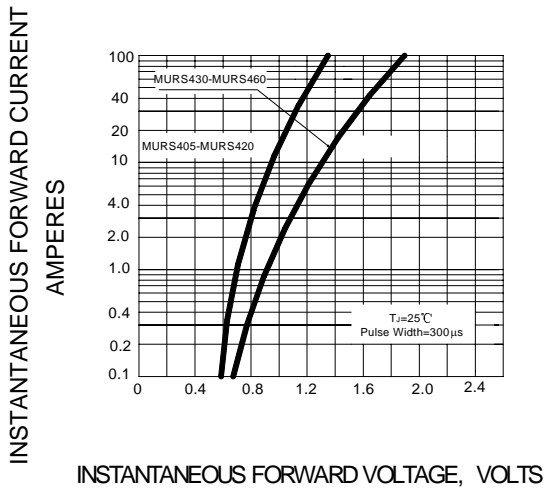
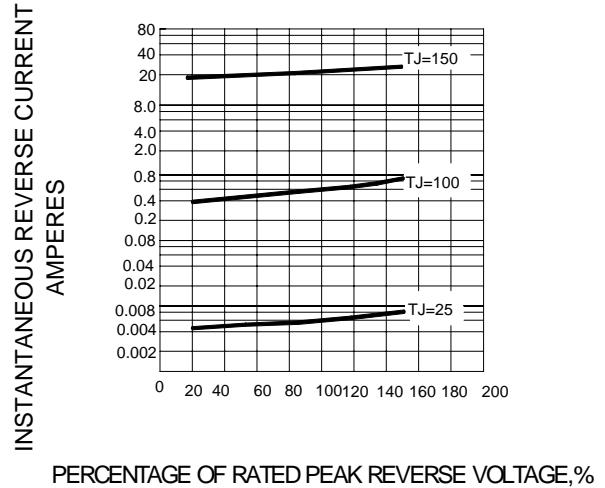
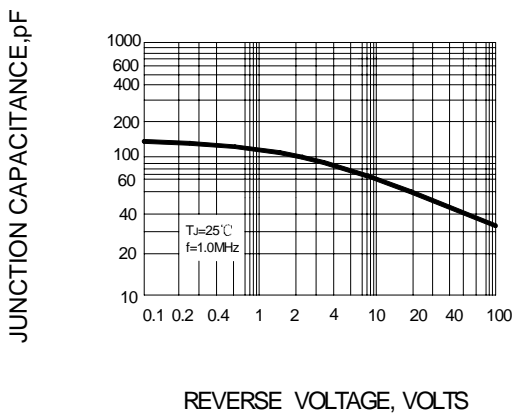
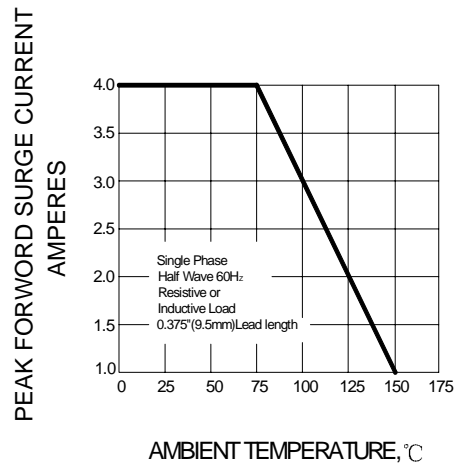
3. Thermal resistance from junction to ambient.

Ratings AND Characteristic Curves

FIG.1 – TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC


SET TIME BASE FOR 10/20 ns/cm

NOTES:1.RISE TIME = 7ns MAX INPUT IMPEDANCE = 1M Ω . 22pF.
2.RISE TIME = 10ns MAX SOURCE IMPEDANCE = 50 Ω .

FIG.2 – TYPICAL FORWARD CHARACTERISTIC

FIG.3 – TYPICAL REVERSE CHARACTERISTIC

FIG.4 – TYPICAL JUNCTION CAPACITANCE

FIG.5 – FORWARD DERATING CURVE


PACKAGE	SPQ/PCS	CARTON SPQ/PCS	CARTON SIZE/CM	CARTON GW/KG	CARTON NW/KG
SMC	3000/REEL	42000	36X36X36.5	18.50	15.50