

20.0Amp Schottky Barrier Rectifiers

SR2020C~SR20100C

Features

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ Construction utilizes void-free molded plastic technique
- ◆ Low reverse leakage
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed:
250°C, 0.25 "(6.35mm) from case for 10 seconds

Mechanical Data

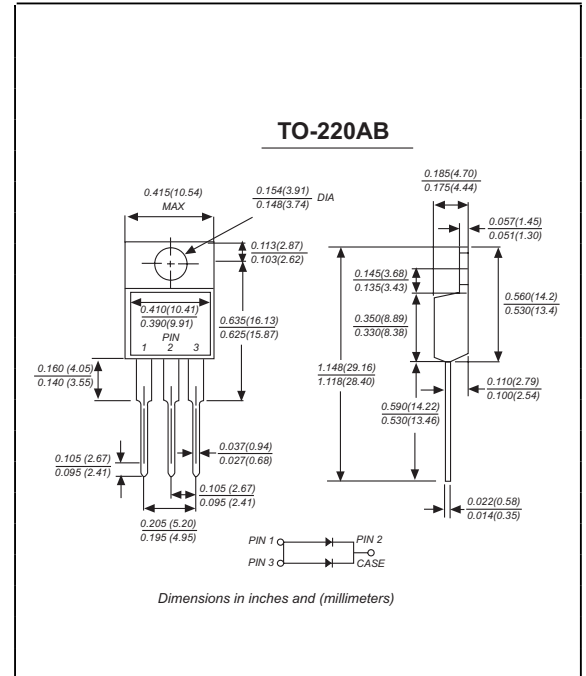
Case : TO-220AB molded plastic body

Terminals : Leads solderable per MIL-STD-750, Method 2026

Polarity : As marked

Mounting Position : Any

Weight : 0.080 ounce, 2.24 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	SR 2020C	SR 2030C	SR 2040C	SR 2045C	SR 2050C	SR 2060C	SR 2070C	SR 2080C	SR 2090C	SR 20100C	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	45	50	60	70	80	90	100	VOLTS
Maximum RMS voltage	V_{RMS}	14	21	28	32	35	42	49	56	63	70	VOLTS
Maximum DC blocking voltage	V_{DC}	20	30	40	45	50	60	70	80	90	100	VOLTS
Maximum average forward rectified current at T_c (see fig.1)	$I_{(AV)}$	20.0										Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	150.0										Amps
Maximum instantaneous forward voltage at 10.0A	V_F	0.55			0.75			0.85			Volts	
Maximum DC reverse current $T_A=25^\circ C$ at rated DC blocking voltage $T_A=100^\circ C$	I_R	1.0			15.0			50.0			mA	
Typical junction capacitance (NOTE 1)	C_J	550			450						pF	
Typical thermal resistance (NOTE 2)	$R_{\theta JC}$	2.0										$^\circ C/W$
Operating junction temperature range	T_J	-65 to +125					-65 to +150					$^\circ C$
Storage temperature range	T_{STG}	-65 to +150										$^\circ C$

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

2. Thermal resistance from junction to case

Ratings And Characteristic Curves

SR2020C THRU SR20100C

FIG. 1- FORWARD CURRENT DERATING CURVE

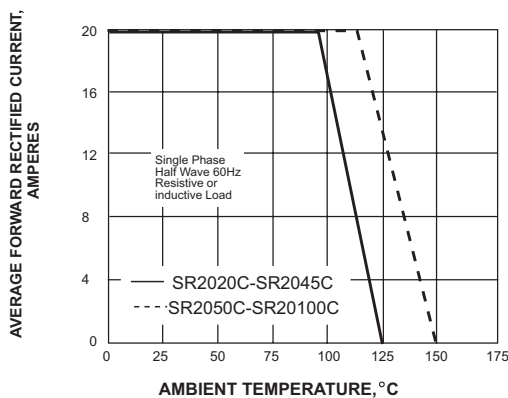


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

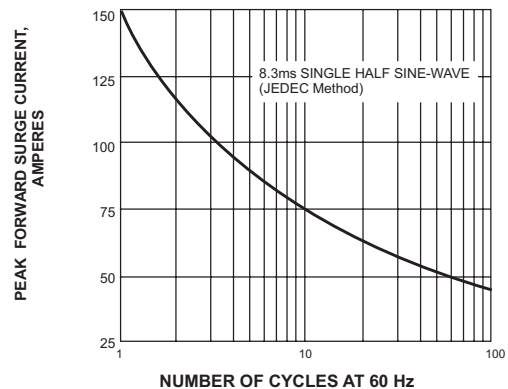


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

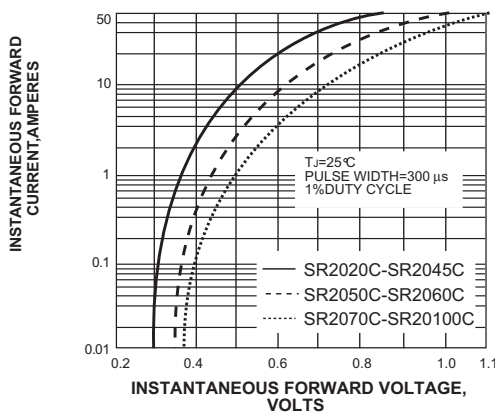


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

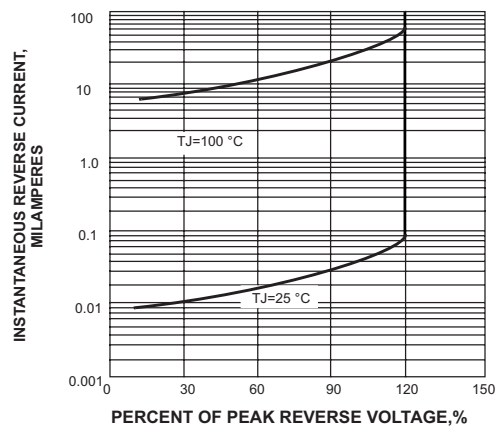


FIG. 5-TYPICAL JUNCTION CAPACITANCE

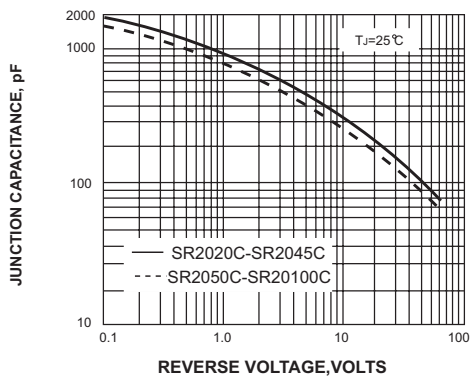


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE

