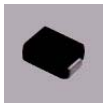
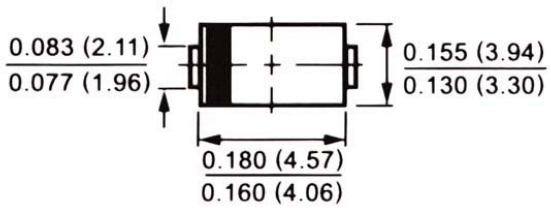
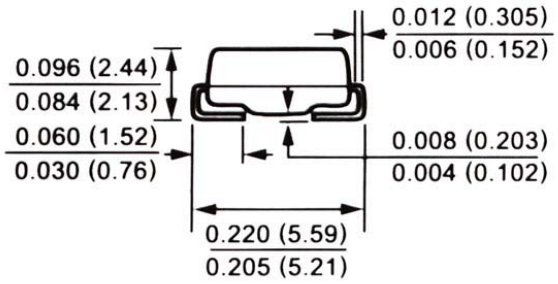
RB1A THRU RB1M

SURFACE MOUNTED FAST RECOVERY RECTIFIER
VOLTAGE: 50 TO 1000V CURRENT: 1.0A



SMB/DO-214AA





Dimensions in inches and (millimeters)

Features

- Glass passivated junction chip
- For surface mounted application
- Low profile package
- Built-in strain relief
- High surge capability
- High temperature soldering guaranteed
  250℃/10sec/at terminal/complete device
- Fast recovery time for high efficiency

Mechanical data

- Cases: Molded with UL-94 class V-0 recognized Flame Retardant Epoxy
- Terminals: Plated axial leads solderable MIL-STD 202E, method 208C
- Polarity: Color band denote cathode end
- Weight:0.003 ounce, 0.093 gram

Maximum ratings and electrical characteristics

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

Parameter	Symbols	RB1A	RB1B	RB1D	RB1G	RB1J	RB1K	RB1M	Units
Maximum recurrent peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	550	700	V
Maximum DC blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum average forward rectified current 3/8" lead length at T_L=100℃	$I_{F(AV)}$	1.0							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	30.0							A
Maximum instantaneous forward voltage at rated forward current	V_F	1.3							V
Maximum DC reverse current Ta=25℃ At rated DC blocking voltage Ta=125℃	I_R	5.0 100.00							μA μA
Maximum Reverse Recovery Time	T_{rr}	150				250	500		nS
Typical junction capacitance	C_J	10.0							pF
Typical thermal resistance	R_{JA}	32.0							℃/W
Storage and operating junction temperature	T_{STG}	-50 to +150							℃

Notes: 1. Measured at 1.0MHz and applied voltage of 4.0Vdc
2. Thermal resistance from junction to terminal mounted on 5×5mm copper pad area
3. Reverse recovery condition If=1.0A,Irr=0.25A