RS201-RS207

SILICON BRIDGE RECTIFIERS

VOLTAGE RANGE: 50 -1000 V
CURRENT: 2.0 A

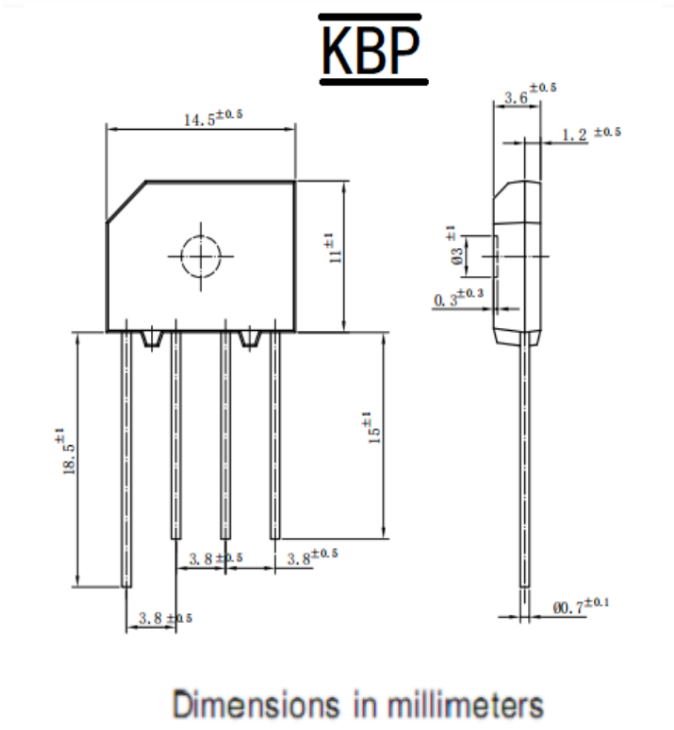
Features

- Ideal for printed circuit boards
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed:
  260°C/10 seconds,0.375"(9.5mm) lead length,
  5 lbs. (2.3kg) tension
- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0

Mechanical Data

- Case: Molded plastic body
- Terminals: Plated leads solderable per
- MIL-STD-750, Method 2026
- Polarity: Polarity symbols marked on case
- Weight:0.069 ounce, 1.95 grams

RoHS COMPLIANT



Dimensions in millimeters

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	RS201	RS202	RS203	RS204	RS205	RS206	RS207	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum average forward output rectified current at T_A=50°C(Note 2)	$I_{(AV)}$	2.0							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	50.0							A
Rating for Fusing(t<8.3ms)	I^2t	10							A^2s
Maximum instantaneous forward voltage drop per birdge element at 1.0A	V_F	1.0							Volts
Maximum DC reverse current T_A=25°C	I_R	10							µA
at rated DC blocking voltage T_A=100°C		0.5							mA
Typical Junction Capacitance (Note 1)	C_J	20							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	28							°C/W
Operating junction temperature range	T_J	-60 to +150							°C
storage temperature range	T_{STG}	-60 to +150							°C

NOTES:
1.Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts.
2.Unit mounted on P.C. board with 0.47 "x 0.47 "(12x12mm) copper pads,0.375 "(9.5mm) lead length.

RATINGS AND CHARACTERISTIC CURVES RS201 THUR RS207

FIG. 1- FORWARD CURRENT DERATING CURVE

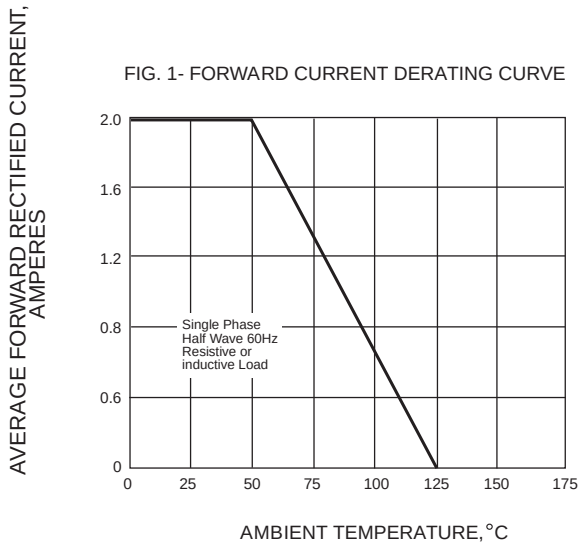


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

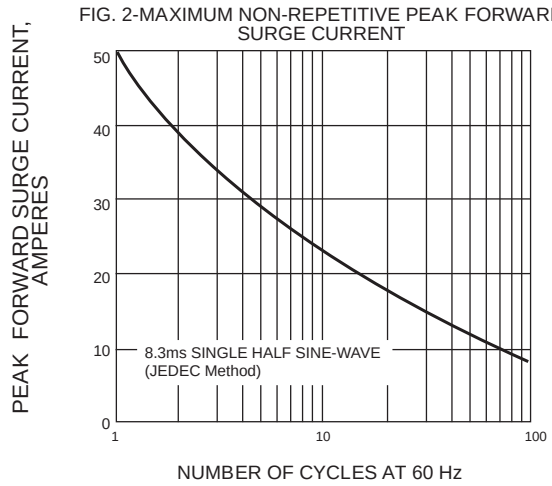


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

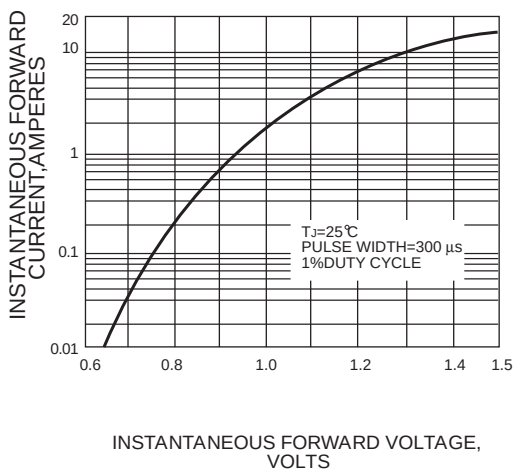


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

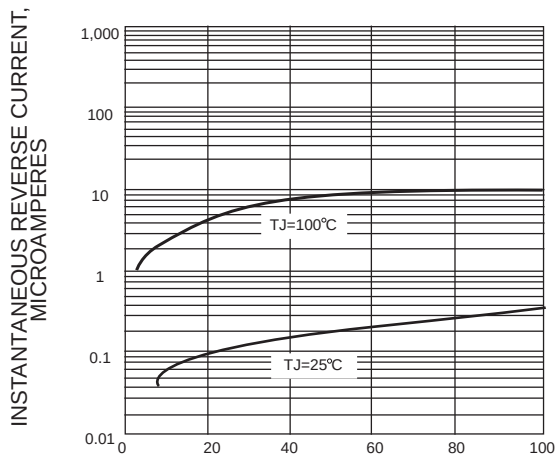


FIG. 5-TYPICAL JUNCTION CAPACITANCE

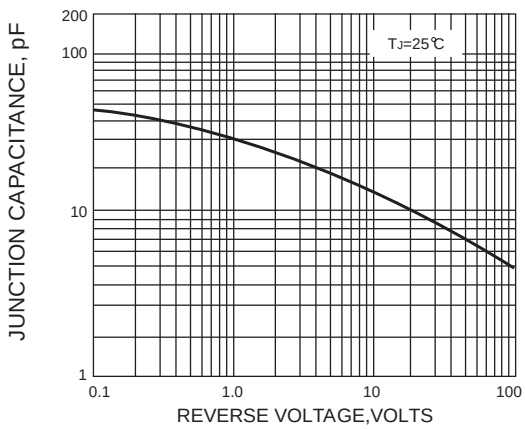


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE