



FUKUCOM COMPANY LTD.

福 靈 有 限 公 司

FLAT P, 3/F, EVEREST INDUSTRIAL CENTRE, 396 KWUN TONG ROAD,  
KWUN TONG, KOWLOON, HONG KONG.  
TEL: 2790-0314 FAX: 2790-0206



SURFACE MOUNT FAST SWITCHING RECTIFIER

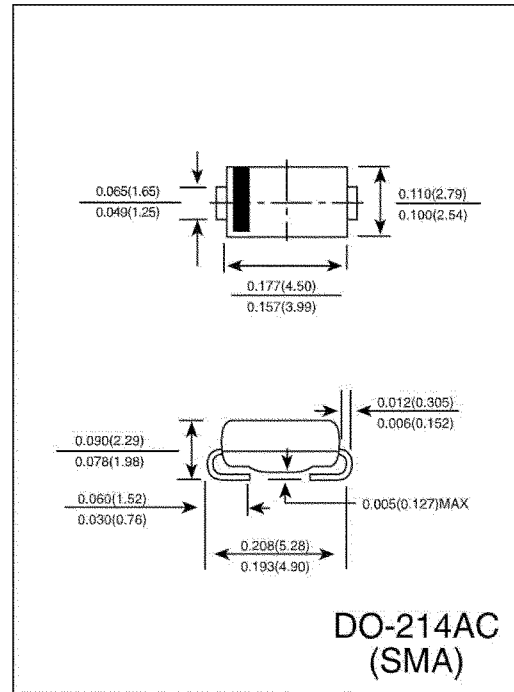
## RS2A THRU RS2K

### FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Low profile surface mount package
- Built-in strain relief
- Fast switching for high efficiency
- Glass Passivated chip junction
- High temperature soldering:  
250°C/10 seconds at terminals.

### MECHANICAL DATA

- Case: JEDEC DO-214AA molded plastic over glass passivated chip
- Terminals: Solder plated, solderable per MIL - STD - 750, Method 2026
- Polarity: Color band denotes cathode end
- Weight: 0.002 ounce, 0.064 gram



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

- Ratings at 25°C ambient temperature unless otherwise specified

## Maximum Ratings & Thermal Characteristics

Parameters	Symbols	RS2A	RS2B	RS2D	RS2G	RS2J	RS2K	Units
Maximum repetitive peak reverse voltage	$V_{RRM}$	50	100	200	400	600	800	V
Maximum RMS voltage	$V_{RMS}$	35	70	140	280	420	500	V
Maximum DC blocking voltage	$V_{DC}$	50	100	200	400	600	800	V
Maximum average forward rectified current at $T_L=100^\circ\text{C}$	$I_{F(AV)}$	1.5						A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	50						A
Typical thermal resistance (NOTE 1)	$R_{\theta JA}$ $R_{\theta JL}$	55 18						°C/W
Operating junction and storage temperature range	$T_J, T_{STG}$	-55 to +150						°C

## Electrical Characteristics

Parameters	Symbols	RS2A	RS2B	RS2D	RS2G	RS2J	RS2K	Units
Maximum instantaneous forward voltage at 1.5A	$V_F$	1.30						V
Maximum DC reverse current at rated DC blocking voltage $T_A=25^\circ\text{C}$ $T_A=125^\circ\text{C}$	$I_R$	5.0 200						$\mu\text{A}$
Maximum reverse recovery time $I_F=0.5\text{A}, I_R=1.0\text{A}, I_{rr}=0.25\text{A}$	$t_{rr}$	150 250 500						ns
Typical junction capacitance at 4.0V, 1MHz	$C_J$	50						pF

Notes: (1) Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.27 x 0.27" (7.0 x 7.0mm) copper pad areas



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### RATINGS AND CHARACTERISTIC CURVE RS2A THRU RS2K

FIG. 1 - FORWARD CURRENT DERATING CURVE

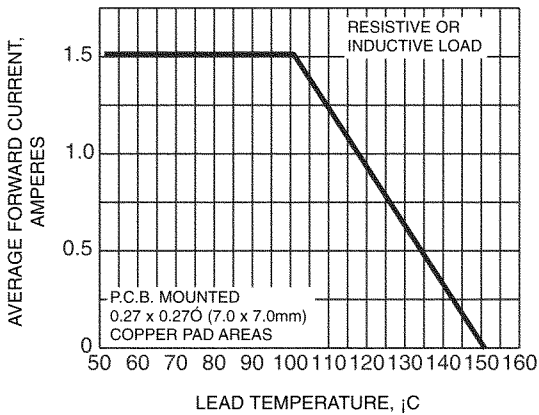


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

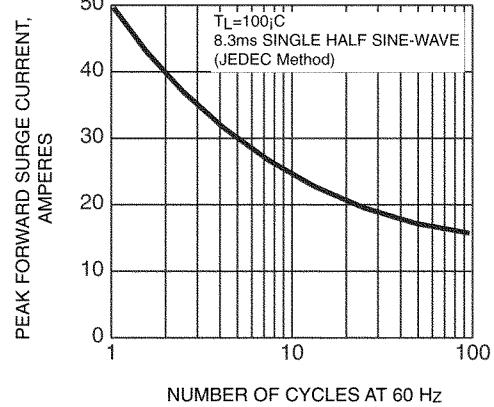


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

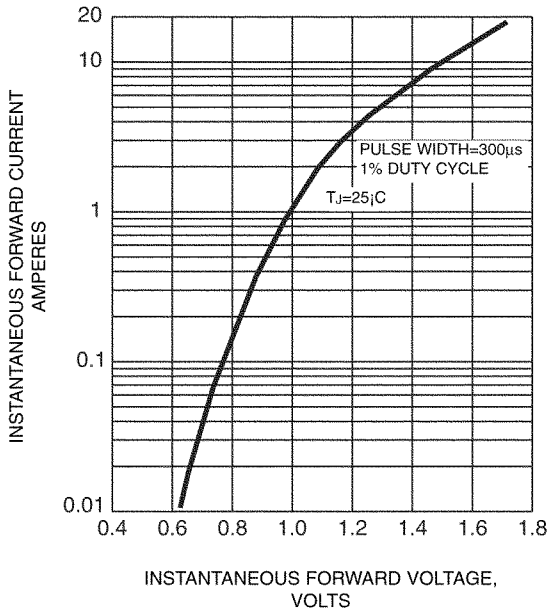


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

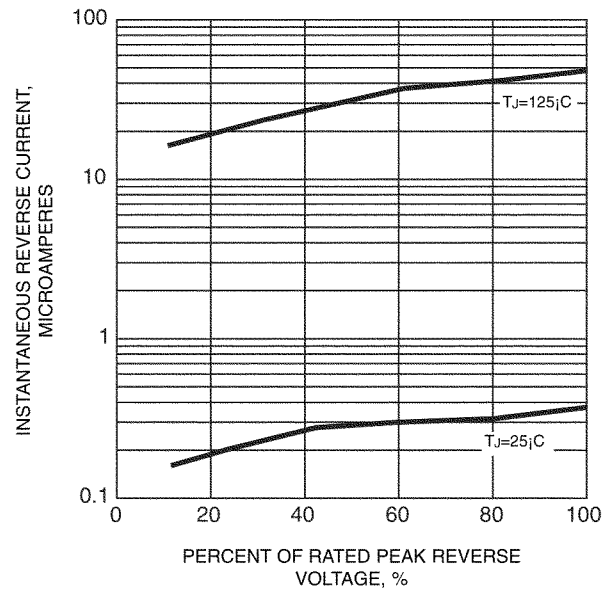
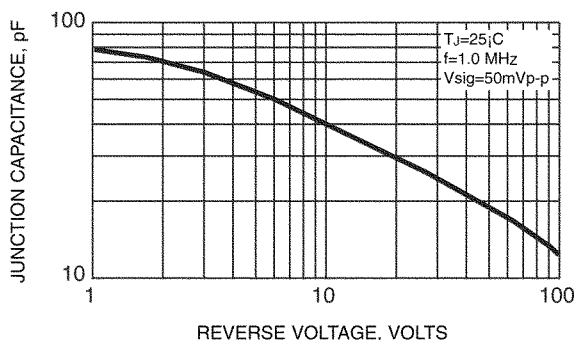


FIG. 5 - TYPICAL JUNCTION CAPACITANCE



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