SURFACE MOUNT RECTIFIERS

REVERSE VOLTAGE: 50 --- 1000 V
CURRENT: 3.0 A

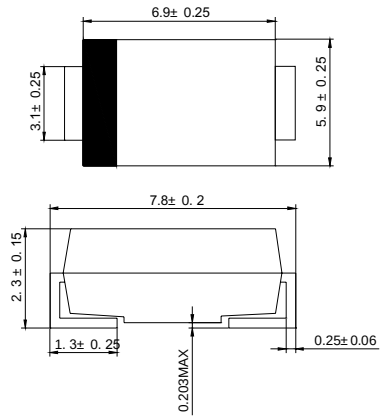
FEATURES

- ◇ Plastic package has underwriters laborator flammability classification 94V-0
- ◇ For surface mounted applications
- ◇ Low profile package
- ◇ Built-in strain relief,ideal for automated placement
- ◇ High temperature soldering: 250oC/10 seconds at terminals

MECHANICAL DATA

- ◇ Case:JEDEC DO-214AB,molded plastic over passivated chip
- ◇ Terminals:Solder plated, solderable per MIL-STD-750, Method 2026
- ◇ Polarity: color band denotes cathode end
- ◇ Weight: 0.007 ounces, 0.21 gram

DO - 214AB(SMC)



Dimensions in millimeters

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified

		RS3A	RS3B	RS3D	RS3G	RS3J	RS3K	RS3M	UNITS
Maximum recurrent peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RWS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum average forword rectified current at T_L=90°C	$I_{F(AV)}$	3.0							A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load	I_{FSM}	100							A
Maximum instantaneous forward voltage at 3.0A	V_F	1.3							V
Maximum DC reverse current @T_A=25°C at rated DC blockjing voltage @T_A=125°C	I_R	10 200							μA
Maximum reverse recovery time (NOTE 1)	t_{rr}	150				250	500		ns
Typical junction capacitance (NOTE 2)	C_J	32							pF
Typical thermal resitance (NOTE 3)	$R_{\theta JA}$	22							°C/W
Operating junction and storage temperature range	$T_J T_{STG}$	-55--------+150							°C

NOTE: 1.Reverse recovery time test conditions:I_F=0.5A,I_R=1.0A,I_{rr}=0.25A

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

3. Thermal resistance from junction to ambient and junction to lead P.C.B.mounted on 0.2"X0.2"(5.0X5.0mm^2) copper pad areas

FIG.1 -- FORWARD DERATING CURVE

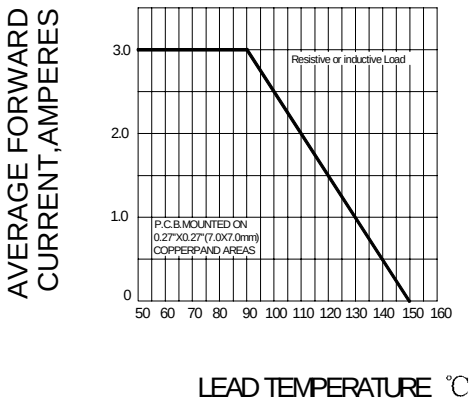


FIG.2 PEAK FORWARD SURGE CURRENT

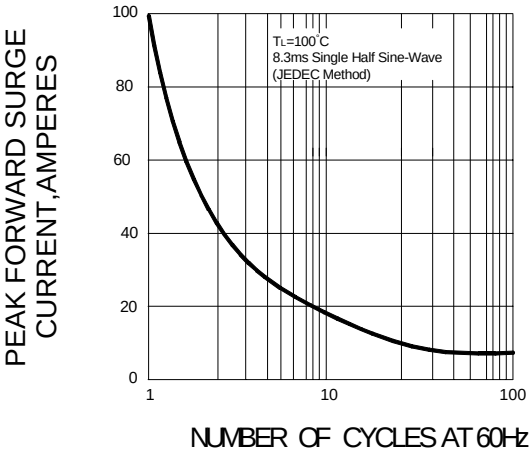


FIG.3 -- TYPICAL FORWARD CHARACTERISTICS

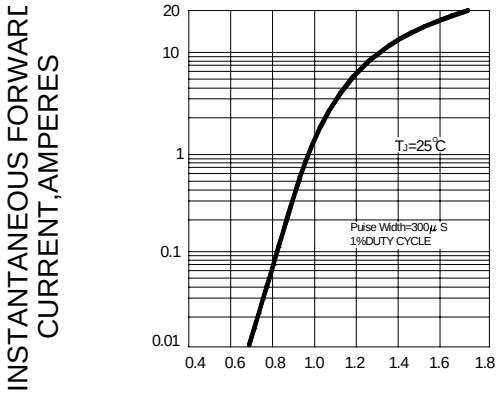


FIG.4 -- TYPICAL REVERSE CHARACTERISTICS

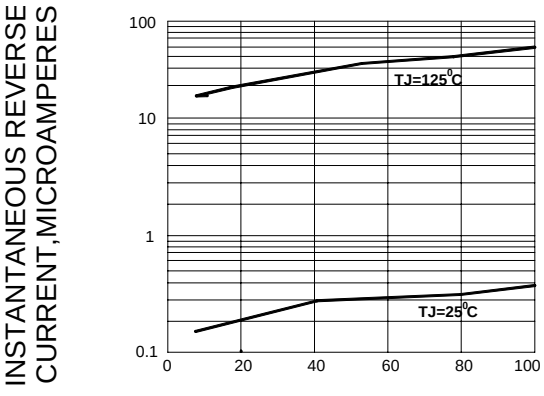


FIG.5-TYPICAL JUNCTION CAPACITANCE

