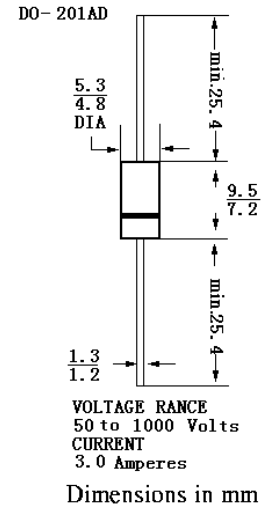


R30A THRU R30M

FAST SILICON RECTIFIERS

Features

- Low forward voltage
- High current capability
- Low leakage current
- High surge capability
- Low cost



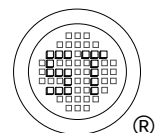
Absolute Maximum Ratings and Characteristics

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

	R30A	R30B	R30D	R30G	R30J	R30K	R30M	Units
Maximum Recurrent Peak Reverse Voltage*	50	100	200	400	600	800	1000	V
Maximum RMS Voltage*	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage*	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current 0.375", 9.5 mm Lead Length at T _A = 60 °C	3							A
Peak Forward Surge Current 8.3ms single half sine-wave	150							A
Maximum Forward Voltage at 3A Peak	1.3							V
Maximum DC Reverse Current, at Rated DC Blocking Voltage	5							uA
Maximum Full Load Reverse Current , Full Cycle Average, 0.375" , (9.5 mm) Lead Length at T _A = 55 °C	50							uA
Typical Junction Capacitance (Note 1)	65							pF
Maximum Reverse Recovery Time (Note 2)	150	150	150	150	250	500	500	ns
Operating and Storage Temperature Range	-65 to +175							°C

Notes:

1. Measured at 1 MHz and applied reverse voltage of 4 V_{DC}.
2. Reverse Recovery Test Conditions: I_F = 0.5A, I_R = 1A, I_{rr} = 0.25A



R30A THRU R30M

FIG.1-REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

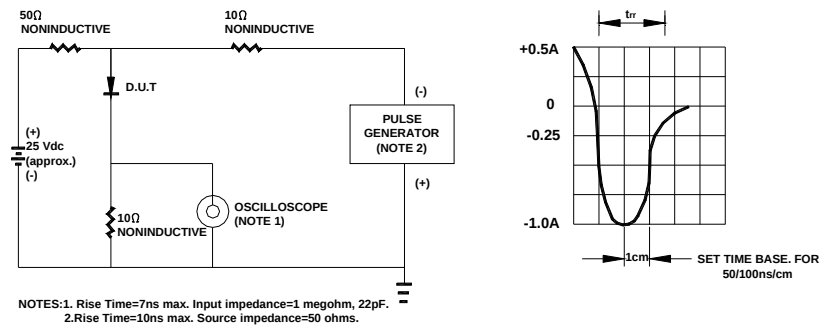


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

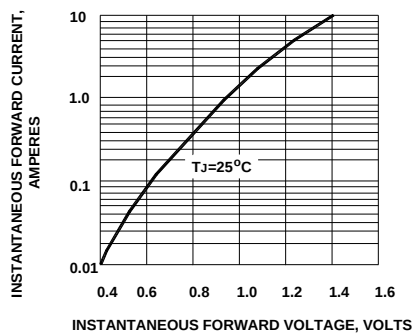


FIG.3- PEAK FORWARD SURGE CURRENT

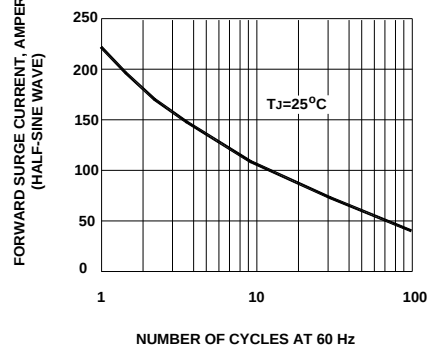


FIG.4-FORWARD CURRENT DERATING CURVE

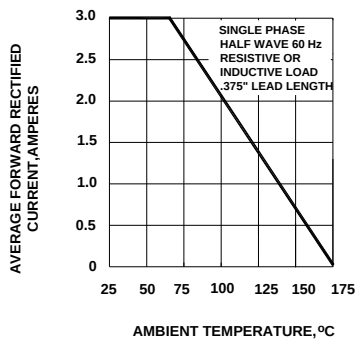
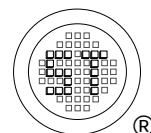
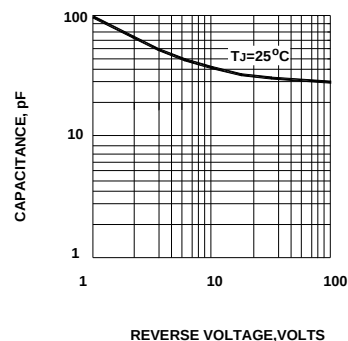


FIG.5-TYPICAL JUNCTION CAPACITANCE



R30A THRU 30M

FIG.4-FORWARD CURRENT DERATING CURVE

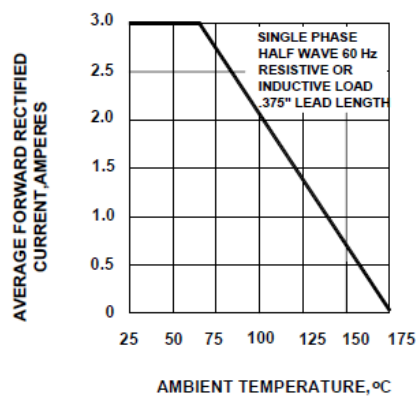


FIG.5-TYPICAL JUNCTION CAPACITANCE

