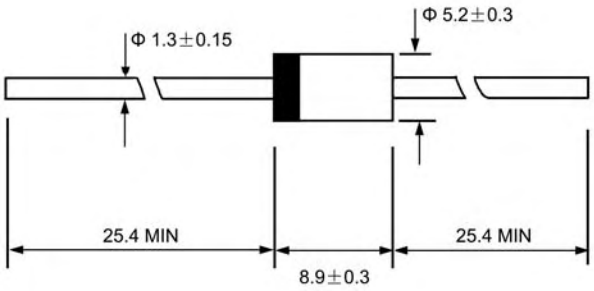
4A1-4A10

Plastic Silicon Rectifiers

VOLTAGE RANGE: 100 --- 1000 V
CURRENT: 4.0 A

DO - 27



Dimensions in millimeters

Features

- ◇ Low cost
- ◇ Diffused junction
- ◇ Low leakage
- ◇ Low forward voltage drop
- ◇ High current capability
- ◇ Easily cleaned with Freon,Isopropanol and similar solvents

Mechanical Data

- ◇ Case: JEDEC DO-27,molded plastic
- ◇ Terminals: Axial lead ,solderable per MIL- STD-202,Method 208
- ◇ Polarity: Color band denotes cathode
- ◇ Weight: 0.041 ounces,1.15 grams
- ◇ Mounting position: Any

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.

Single phase,half wave,50 Hz,resistive or inductive load. For capacitive load,derate by 20%.

		4A1	4A2	4A4	4A6	4A8	4A10	UNITS
Maximum recurrent peak reverse voltage	V_{RRM}	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	70	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	100	200	400	600	800	1000	V
Maximum average forward rectified current 9.5mm lead length, @T_A=75℃	$I_{F(AV)}$	4.0						A
Peak forward surge current 10ms single half-sine-wave superimposed on rated load @T_J=125℃	I_{FSM}	250.0						A
Maximum instantaneous forward voltage @ 4.0A	V_F	0.95						V
Maximum reverse current @T_A=25℃ at rated DC blocking voltage @T_A=100℃	I_R	10.0 100.0						μ A
Typical junction capacitance (Note1)	C_J	50						pF
Typical thermal resistance (Note2)	$R_{\theta JA}$	20						℃/W
Operating junction temperature range	T_J	- 55 ---- +150						℃
Storage temperature range	T_{STG}	- 55 ---- +150						℃

NOTE: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
2. Thermal resistance from junction to ambient.

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Ratings AND Charactieristic Curves

FIG.1 -- FORWARD DERATING CURVE

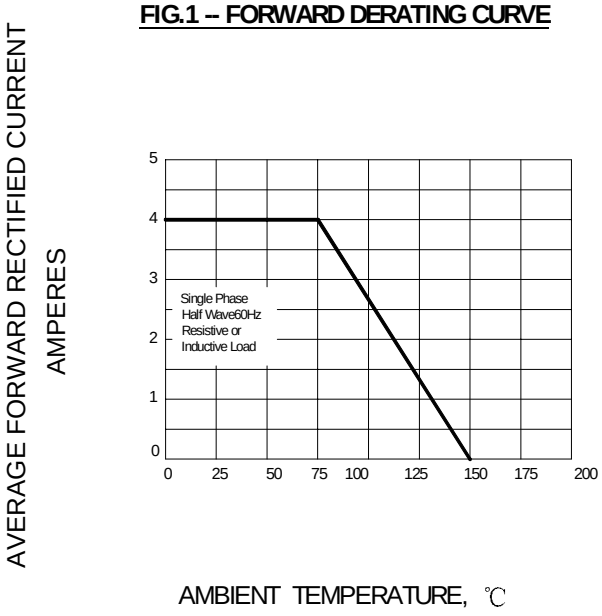

FIG.2 -- TYPICAL FORWARD CHARACTERISTICS

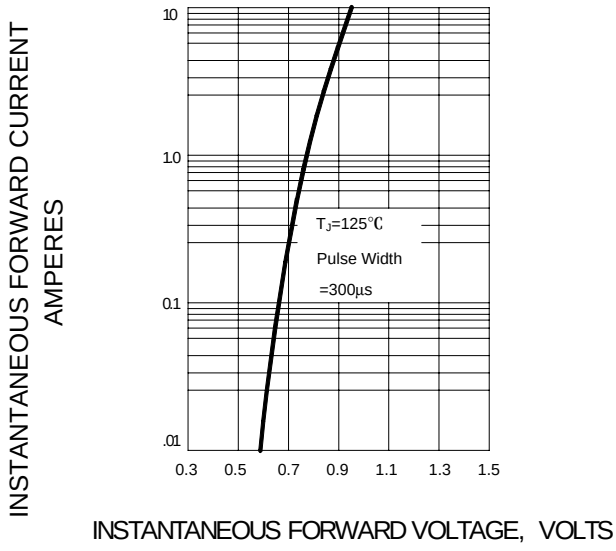

FIG.3 –MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

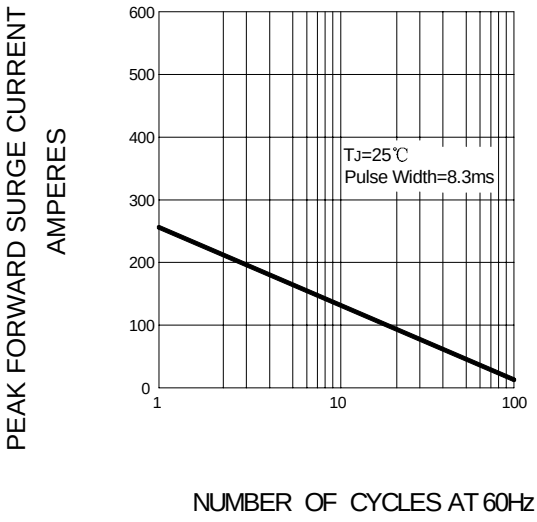
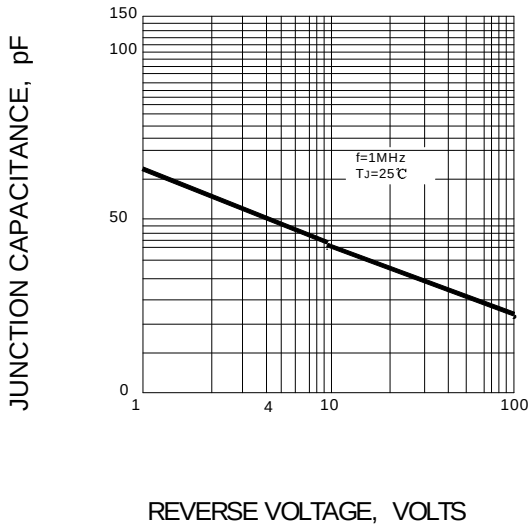
FIG.4 – TYPICAL JUNCTION CAPACITANCE