迪一電子®

1F1 THRU 1F7

1.0 AMP.Fast Plastic silicon Recovery Rectifiers

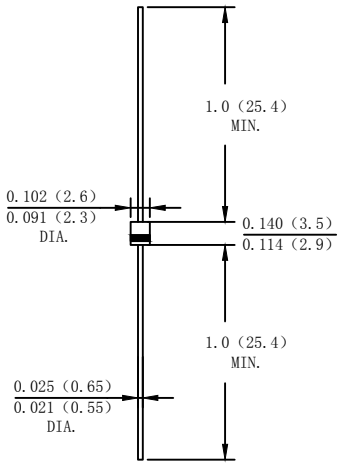
Features

- Low leakage
- High current capability
- Fast switching for high efficiency
- Flammability classification 94V-O utilizing
- Exceeds environmental standards of MIL-S-19500/228

Mechanical Data

- Case: Moeded plastic R-1
- Terminals: Axial leads solderable to MIL-STD-202,Method 208
- Polarity: Color band dentes cathode end
- Mounting Position: Any

R-1



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Rating at 25℃ ambient temperature unless otherwise specified

Single phase,half wave,60Hz,resistive or inductive load

For capacitive load derate current by 20%

Type Number	SYMBOL	1F1	1F2	1F3	1F4	1F5	1F6	1F7	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RM}	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
Average Rectified Output Current (Note 1) @T_A =75℃	I_O	1.0							A
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	25							A
Forward Voltage @IF=1.0A	V_{FM}	1.3							V
Peak Reverse Current @T_A =25℃	I_R	5.0							uA
At Rated DC Blocking Voltage @T_A =100℃		100							
Maximum Reverse Recovery Time (Note2)	T_{RR}	150				250	500		nS
Typical Junction Capacitance (Note 3)	C_j	12							pF
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}$	65							K/W
Operating Temperature Range	T_j	-65 to + 125							℃
Storage Temperature Range	T_{STG}	-65 to + 150							℃

Note: 1. Leads maintained at ambient temperature at a distance of 9.5mm from the case

2.Reverse Recovery Test Conditions: IF=0.5A, IR=1.0A, IRR=0.25A

3. Measured at 1.0 MHz and Applied reverse Voltage of 4.0V D.C

1F1 THRU 1F7

Fig. 1-FORWARD CURRENT DERATING CURVE

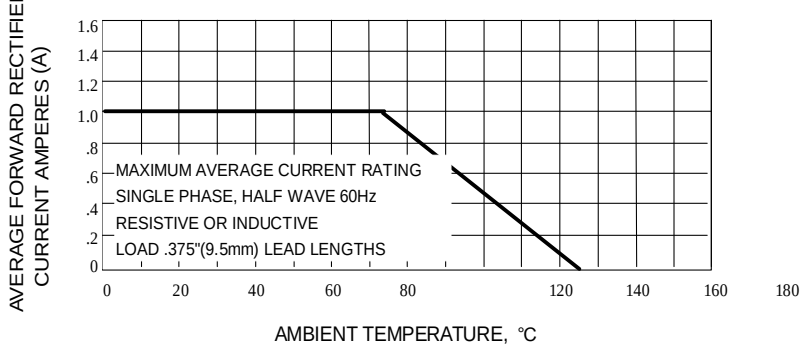


Fig. 2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

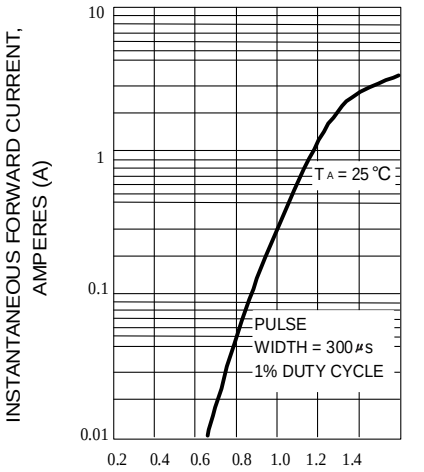


Fig.3-PEAK FORWARD SURGE CURRENT

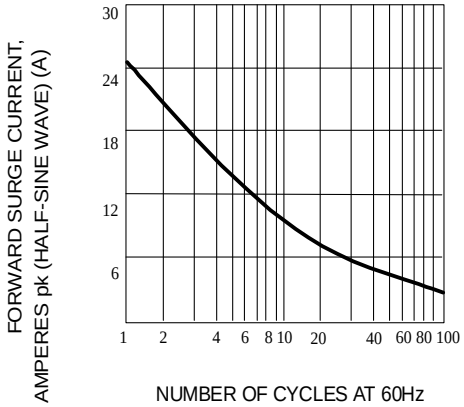


Fig.4-TYPICAL JUNCTION CAPACITANCE