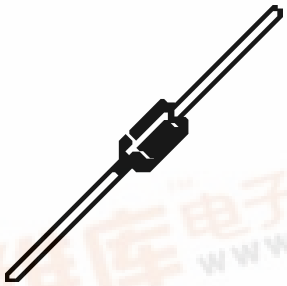
Semiconductor

Data Sheet

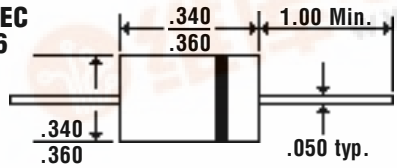
6.0 Amp MINIATURE PLASTIC SILICON RECTIFIERS

FR6A01 . . . 07 Series

Description



Mechanical Dimensions



Features

- LOW COST
- LOW LEAKAGE
- DIFFUSED JUNCTION
- MEETS UL SPECIFICATION 94V-0

	FR6A01 . . . 07 Series							Units
Maximum Ratings	**FR6A01**	**FR6A02**	**FR6A03**	**FR6A04**	**FR6A05**	**FR6A06**	**FR6A07**	
Peak Repetitive Reverse Voltage...V_{RRM}	50	100	200	400	600	800	1000	Volts
RMS Reverse Voltage...$V_{R(rms)}$	35	70	140	280	420	560	700	Volts
DC Blocking Voltage...V_{DC}	50	100	200	400	600	800	1000	Volts
Average Forward Rectified Current...$I_{F(av)}$ T_A = 60°C *(Note 3)*				6.0				Amps
Non-Repetitive Peak Forward Surge Current...I_{FSM} @ Rated Current & Temp				400				Amps
Operating & Storage Temperature Range...T_J, T_{STRG}				-65 to 175				°C
Electrical Characteristics								
Maximum Forward Voltage @ 6.0A...V_F				1.0				Volts
Maximum DC Reverse Current...I_R @ 25°C				10				µAmps
@ Rated DC Blocking Voltage @100°C				100				µAmps
Maximum Full Load Reverse Current...I_R				50				µAmps
Typical Junction Capacitance...C_J *(Note 1)*				100				pF
Typical Thermal Resistance...$R_{\theta JA}$ *(Note 2)*				10				°C / W

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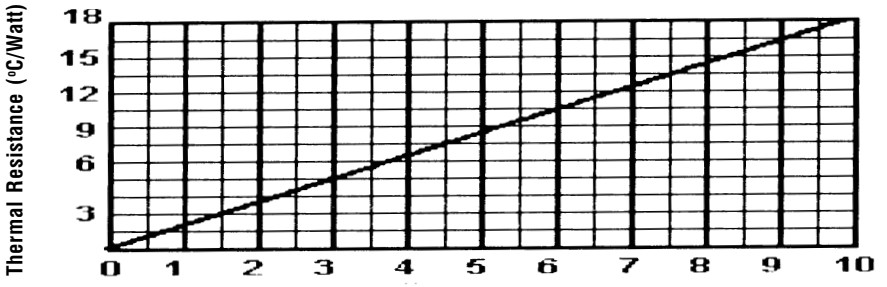
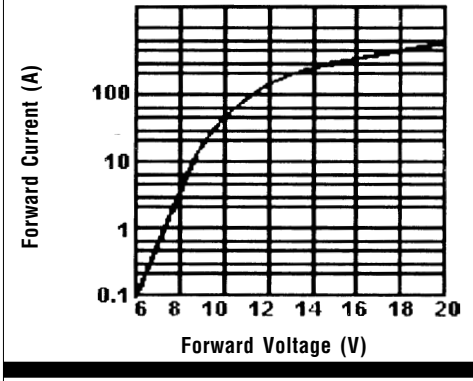
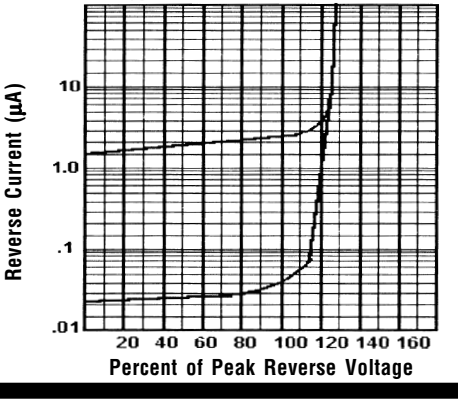
Typical Thermal Resistance vs. Lead Length



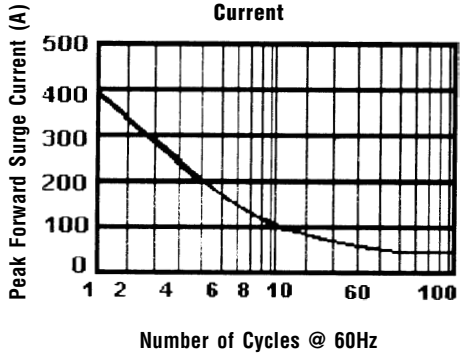
Typical Forward Characteristics



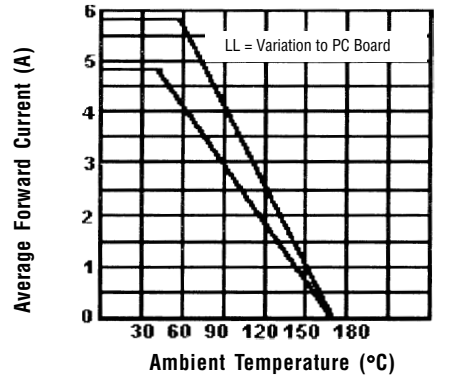
Typical Reverse Characteristics



Maximim Non-Repetitive Surge Current



Forward Current Derating Curve



Ratings at 25 Deg. C ambient temperature unless otherwise specified.

Single Phase Half Wave, 60 Hz Resistive or Inductive Load.

For Capacitive Load, Derate Current by 20%.

NOTES: 1. Measured @ 1 MHz and applied reverse voltage of 4.0V.
2. Thermal Resistance Junction to Ambient, Jedec Method.
3. .375", (9.5mm) lead lengths.