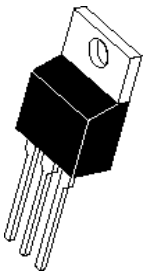
Data Sheet

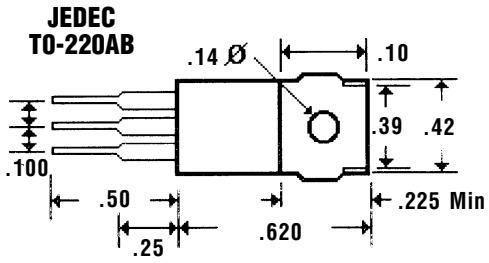
16 Amp PLASTIC SILICON RECTIFIERS

FR1601 . . . 1606 Series

Description



Mechanical Dimensions



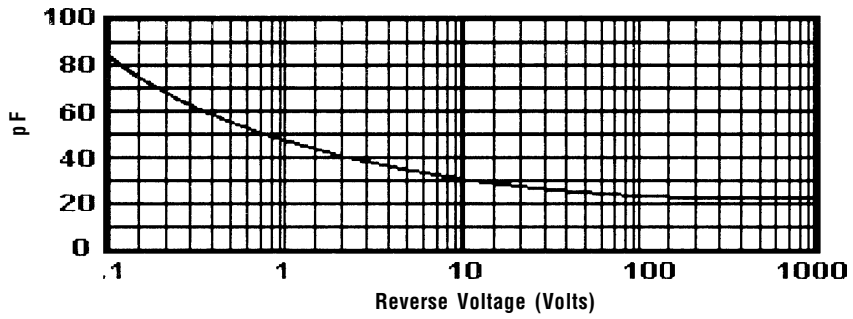
Features

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

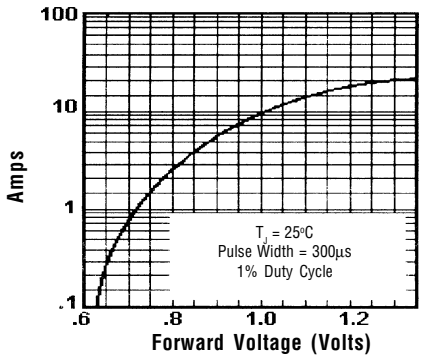
Electrical Characteristics @ 25°C.	FR1601 . . . 1606 Series						Units
Maximum Ratings	**FR1601**	**FR1602**	**FR1603**	**FR1604**	**FR1605**	**FR1606**	
Peak Repetitive Reverse Voltage...V_{RRM}	50	100	200	400	600	800	Volts
RMS Reverse Voltage...$V_{R(rms)}$	35	70	140	280	420	560	Volts
DC Blocking Voltage...V_{DC}	50	100	200	400	600	800	Volts
Average Forward Rectified Current...$I_{F(av)}$ T_A = 55°C *(Note 3)*	..... 16						Amps
Non-Repetitive Peak Forward Surge Current...I_{FSM} @ Rated Current & Temp	..... 300						Amps
Forward Voltage @ 8.0A...V_F	..... 1.1						Volts
DC Reverse Current...I_R @ 25°C	..... 10						µAmps
@ Rated DC Blocking Voltage @ 100°C	..... 100						µAmps
Typical Junction Capacitance...C_J *(Note 1)*	..... 55						pF
Typical Thermal Resistance...$R_{\theta JC}$ *(Note 2)*	..... 3.0						°C / W
Operating & Storage Temperature Range...T_J, T_{STRG}	..... -65 to 175						°C

16 Amp PLASTIC SILICON RECTIFIERS

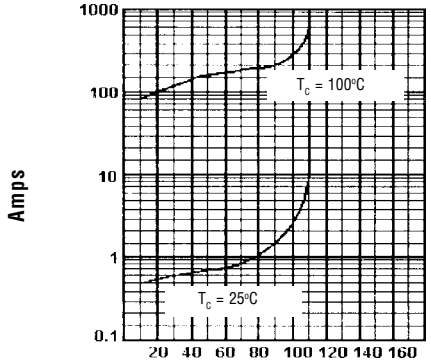
Typical Junction Capacitance



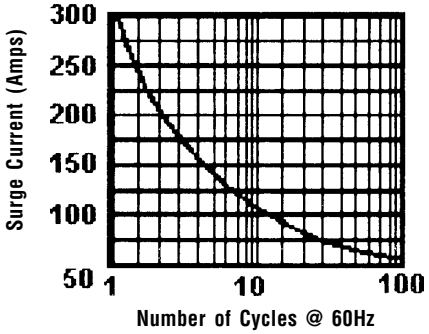
Typical Forward Characteristics



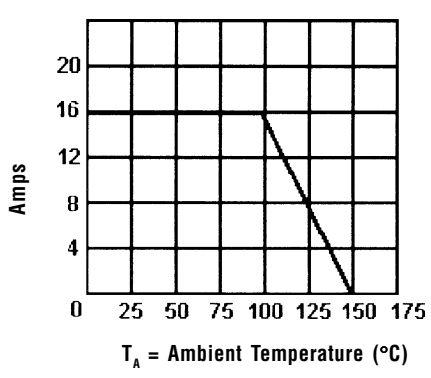
Typical Reverse Characteristics



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. When Mounted to heat sink, from body.