



16F SERIES

100 V – 1600 V

16 AMPS

Features:

- All diffused series
- Available in normal and reverse polarity
- Device conforms to IS 3700 (III) & IS 4400 (III)
- Device outline conforms to JEDEC DO-203AA (DO- 4)
- Available in avalanche characteristic



PICTURE IS FOR REFERENCE ONLY

ELECTRICAL CHARACTERISTICS AND RATINGS

Parameter	Symbol	Value	Units	Conditions
Max. average forward current	$I_{F(AV)}$	16	A	$T_C = 160^\circ\text{C}$
Max. peak forward voltage drop	V_{FM}	1.2	V	Rated $I_{F(peak)}$
Max. peak one cycle non-repetitive surge current	I_{FSM}	350	A	10msec
Max. repetitive peak forward current	I_{FRM}	80	A	
Max. I^2t rating (non-repetitive) for 10 msec	I^2t	612	A^2sec	

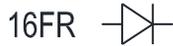
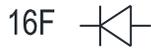
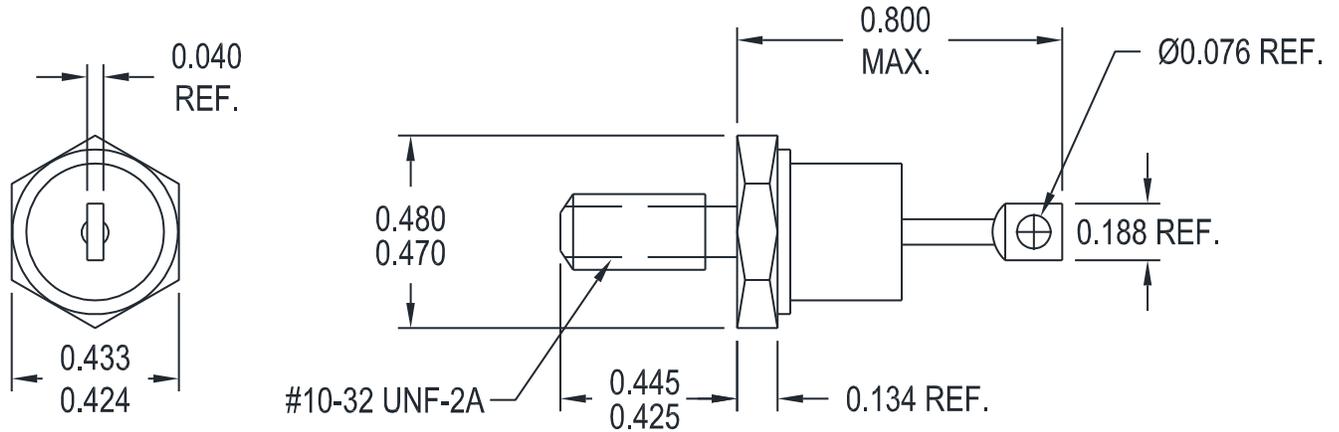
THERMAL AND MECHANICAL SPECIFICATIONS

Parameter	Symbol	Value	Units	Conditions
Max. thermal resistance junction to case	Θ_{J-C}	1.6	$^\circ\text{C}/\text{W}$	
Contact thermal resistance	Θ_{C-H}	0.5	$^\circ\text{C}/\text{W}$	
Operating junction temperature	T_J	-65 to 175	$^\circ\text{C}$	
Storage temperature	T_{STG}	-65 to 200	$^\circ\text{C}$	
Mounting torque		0.14 Min 0.17 Max	M-Kg	Non-lubricated threads
Approximate weight	W	7	gm	

Parameter	Symbol	10	20	40	60	80	100	120	140	160
Max. repetitive peak reverse voltage	V_{RRM}	100	200	400	600	800	1000	1200	1400	1600
Max. non-repetitive peak reverse voltage	V_{RSM}	150	300	500	700	900	1100	1300	1500	1700
Max. RMS reverse voltage	$V_{R(RMS)}$	70	140	280	420	560	700	840	980	1120
Max. DC blocking voltage	V_R	100	200	400	600	800	1000	1200	1400	1600
Recommended RMS working voltage		40	80	160	240	320	400	480	560	640
Max. peak reverse leakage current @ V_{RRM} , T_C (Ma)	I_{RM}	1								



CASE OUTLINE & DIMENSIONS



All dimensions in inches

16	F	R	160
1	2	3	4

- 1 – 16 = Series Device
- 2 – F = Standard Diode
- 3 – None = Normal Polarity
R = Reverse Polarity
- 4 – Voltage Code x 10 = V_{RRM}

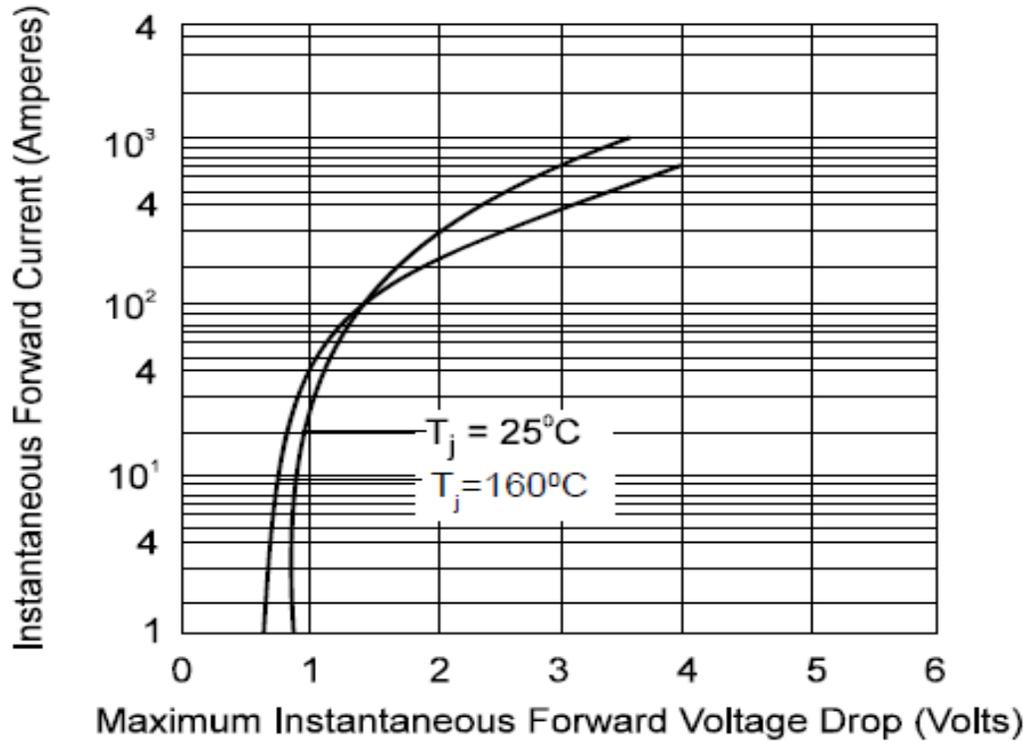


Fig. 1 Forward Voltage vs. Forward Current

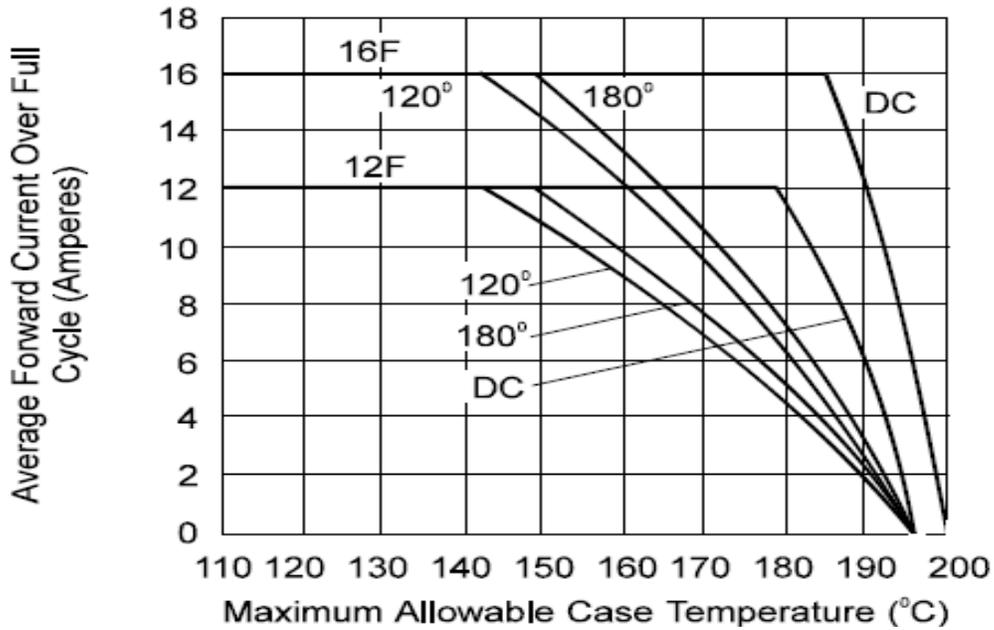


Fig. 2 – Average Forward Current vs. Case Temperature

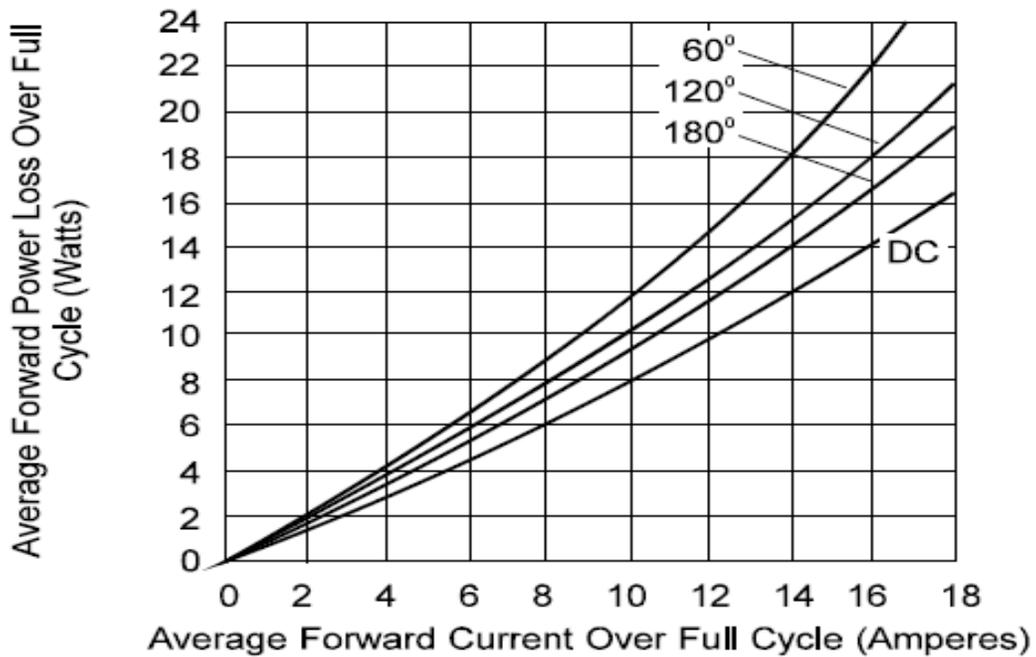


Fig. 3 Maximum Forward Power Loss vs. Forward Current