DEC

FAST RECOVERY RECTIFIER

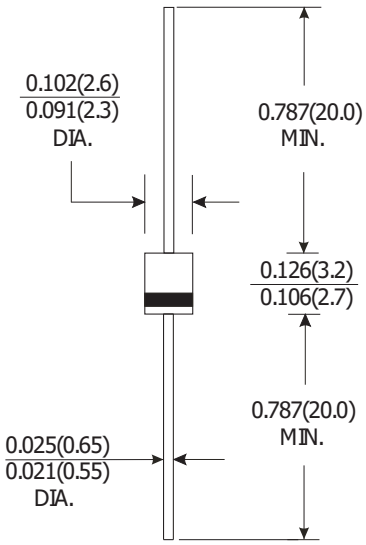
1F1G THRU 1F7G

CURRENT 1.0 A
VOLTAGE 50 to 1000 V

Features

- Glass Passivated Chip Junction
- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability

R-1



Dimensions in inches and (millimeters)

Mechanical data

- Case : R-1, Molded Plastic
- Terminals : Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity : Cathode Band
- Mounting position : Any
- Wieght : 0.35 grams (approx.)
- Lead Free: For RoHS / Lead Free Version

Maximum Ratings And Electrical Characteristics

(Ratings at 25°C ambient temperature unless otherwise specified, Single phase, half wave 60Hz, resistive or inductive load. For capacitive load, derate by 20%)

Items		Symbols	1F1G	1F2G	1F3G	1F4G	1F5G	1F6G	1F7G	Units
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage		V_{RRM} V_{RWM} V_R	50	100	200	400	600	800	1000	V
RMS Reverse Voltage		$V_{R(RMS)}$	35	70	140	280	420	560	700	V
Average Rectified Output Current at T_A =55°C(1)		I_O	1.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)		I_{FSM}	30							A
Forward Voltage at I_F=1.0A		V_{FM}	1.2							V
Peak Reverse Current At Rated DC Blocking Voltage	T_A=25°C	I_{RM}	5.0							μA
	T_A=100°C		100							
Reverse Recovery Time(2)		T_{RR}	150				250	500		ns
Typical Junction Capacitance(3)		C_J	15							pF
Typical Thermal Resistance Junction to Ambient(1) Typical Thermal Resistance Junction to Lead(1)		$R\theta_{JA}$ $R\theta_{JL}$	55 25							°C/W
Operating Temperature Range		T_J	-65 to +125							°C
Storage Temperature Range		T_{STG}	-65 to +150							°C

Note : (1) Leads maintained at ambient temperature at a distance of 9.5mm from the case.
(2) Measured with IF = 0.5A, IR = 1.0A, IRR = 0.25A
(3) Measured at 1.0 MHz and Applied Reverse Voltage of 4.0V D.C.

Download from alldatasheet.com

DEC

RATINGS AND CHARACTERISTIC CURVES 1F1G THRU 1F7G

FIG.1-TYPICAL FORWARD CHARACTERISTICS

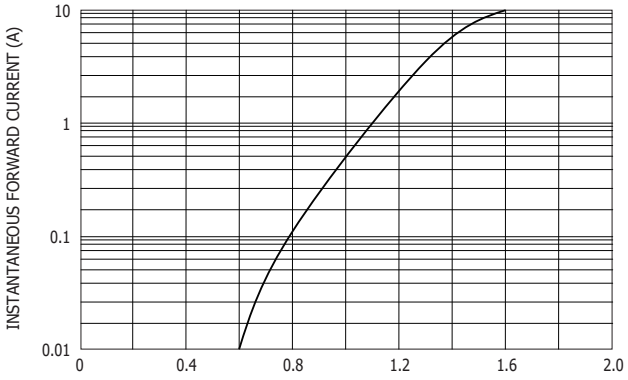


FIG.2-FORWARD CURRENT DERATING CURVE

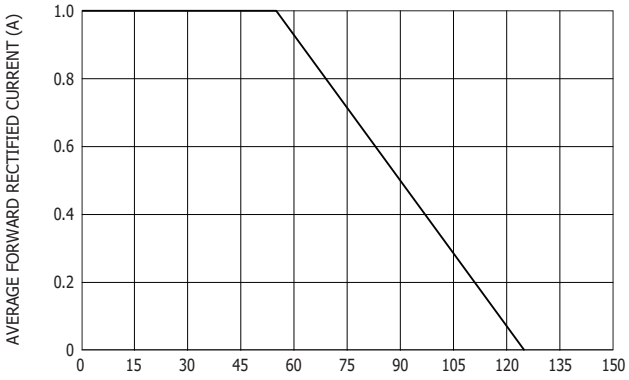


FIG.3-TYPICAL JUNCTION CAPACITANCE

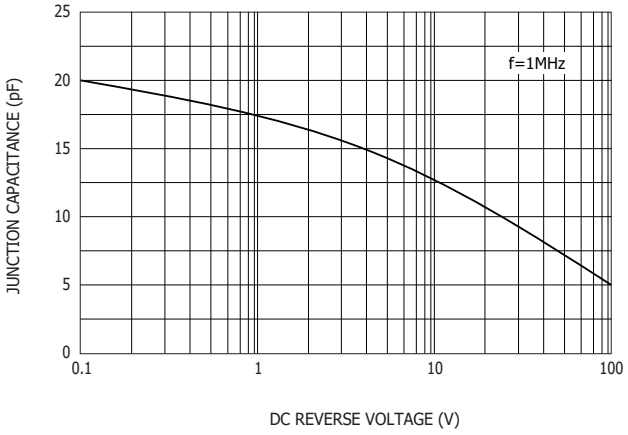


FIG.4-FORWARD SURGE CURRENT DERATING CURVE

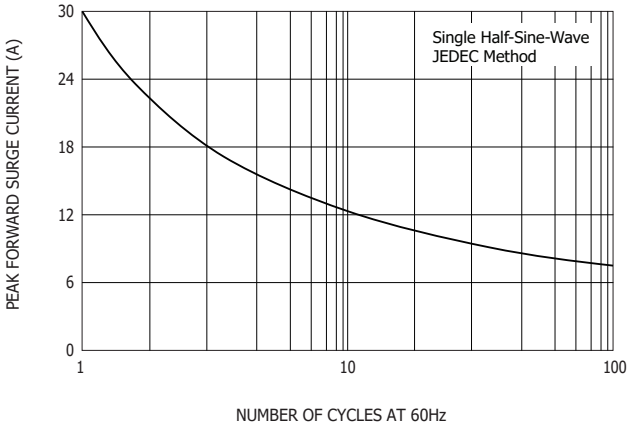
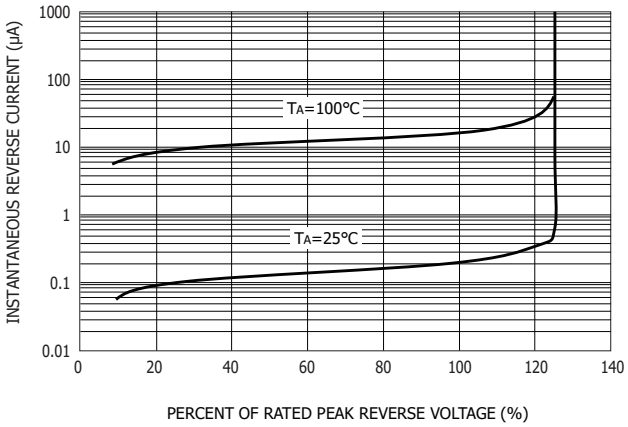


FIG.5-TYPICAL REVERSE CHARACTERISTICS



Download from alldatasheet.com