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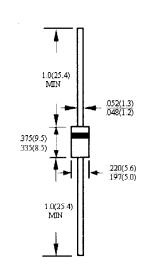
FE30 – 005 - FE30-08 3A FAST EFFICIENT RECTIFIER

FEATURES

- LOW POWER LOSS, HIGH EFFICIENCY
- LOW LEAKAGE
- ◆ LOW FORWARD VOLTAGE DROP
- HIGH CURRENT CAPABILITY
- HIGH SPEED SWITCHING
- HIGH RELIABILITY
- HIGH CURRENT SURGE
- GLASS PASSIVATED CHIP JUNCTION

MECHANICAL DATA

- CASE, MOLDED PLASTIC, DO201AD, DIMENSIONS IN INCHES AND (MILLIMETERS)
- EPOXY: UL 94V-0 RATE FLAME RETARDANT
- LEAD: MIL-STD-202E METHOD 208C GUARANTEED
- MOUNTING POSITION: ANY
- WEIGHT: 1.20 GRAMS



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS RATINGS AT 25°C AMBIENT TEMPERATURE UNLESS CTHERWISE SPECIFIED								ECIFIED			
SINGLE PHASE, HALF WAVE, 60 HZ, RESISTIVE OR INDUCTIVE LOAD. FOR CAPACITIVE LOAD, DERATE CURRENT BY 20%											
RATINGS	SYMBOL	FE30 -005	FE30 -01	FE30 -015	FE30 -02	FE30 -03	FE30 -04	FE30 -05	FE30 -06	FE30 -08	UNITS
MAXIMUM RECURRENT PEAK REVERSE VOLTAGE	V_{RRM}	50	100	150	200	300	400	500	600	800	V

RATINGS	SYMBOL	-005	-01	-015	-02	-03	-04	-05	-06	-08	OMITS
MAXIMUM RECURRENT PEAK REVERSE VOLTAGE	V_{RRM}	50	100	150	200	300	400	500	600	800	V
MAXIMUM RMS VOLTAGE	V _{rims}	35	70	105	140	210	280	350	420	560	V
MAXIMUM DC BLOCKING VOLTAGE	V_{DC}	50	100	150	200	300	400	500	600	800	V
MAXIMUM AVERAGE FORWARD RECTIFIED CURRENT 0.375" (9.5mm) LEAD LENGTH AT TA=55 °C	I_0					3.0					A
PEAK FORWARD SURGE CURRENT, 8.3ms SINGLE HALF SINE-WAVE SUPERIMPOSED ON RATED LOAD	I_{FSM}	60								A	
TYPICAL JUNCTION CAPACITANCE (NOTE 1)	C₁		60 70 30								
TYPICAL THERMAL RESISTANCE (NOTE 2)	R _{tja}	60 70									,C\M
STORAGE TEMPERATURE RANGE	Тато	- 55 TO + 150								°C	
OPERATING TEMPERATURE RANGE	Top				- 5	5TO+	150				°C.

FLECTRICAL CHARACTERISTICS (AT TA = 25°C UNLESS OTHERWISE NOTED)

FLECTRICAL CHARACTERISTICS (AT IA -28 C CIMESS OTHERWISE NOTED)											
CHARACTERISTICS	SYMBOL	FE30 -005	FE30	FE30 -015	FE30 -02	FE30 -03	FE30 -04	FE30 -05	FE30 -06	FE30 -08	UNITS
MAXIMUM FORWARD VOLTAGE AT Io DC	V _F	0.98				1.25		1.85		2.60	V
MAXIMUM REVERSE CURRENT AT 25°C	$I_{\mathbf{R}}$	10								μA	
MAXIMUM REVERSE CURRENT AT 100°C	$I_{\mathbf{R}}$	50								μA	
MAXIMUM REVERSE RECOVERY TIME (NOTE 3)	T_{RR}	25								nS	

- NOTE: 1. MEASURED AT 1 MHZ AND APPLIED REVERSE VOLTAGE OF 4.0 VOLTS
 - 2. BOTH LEADS ATTACHED TO HEAT SINK 20×20×1t(mm) COPPER PLATE AT LEAD LENGTH 5mm
 - 3. REVERSE RECOVERY TEST CONDITIONS: $I_F=0.5A$, $I_R=1.0A$, $I_{RR}=0.25A$

NJ Semi-Conductors reserves the right to change test conditions, parameter limits and package dimensions without notice. Information furnished by NJ Semi-Conductors is believed to be both accurate and reliable at the time of going to press. However, NJ Semi-Conductors assumes no responsibility for any errors or omissions discovered in its use. NJ Semi-Conductors encourages customers to verify that datasheets are current before placing orders.

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