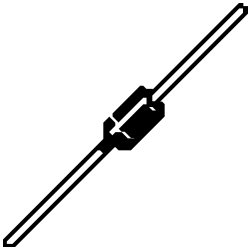
Semiconductor *Data Sheet*

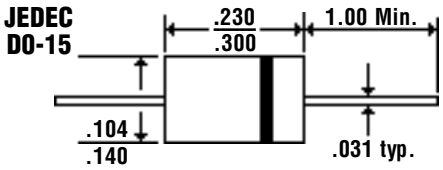
2.0 Amp SUPER FAST PLASTIC RECTIFIERS

SF21~26

Description



Mechanical Dimensions



Features

- **HIGH SURGE CAPABILITY**
- **LOW FORWARD VOLTAGE DROP**
- **HIGH CURRENT CAPABILITY**
- **EXCEEDS ENVIRONMENTAL STANDARDS OF MIL-STD-19500**

							Units
Maximum Ratings	**SF21**	**SF22**	**SF23**	**SF24**	**SF25**	**SF26**	
Peak Repetitive Reverse Voltage...V_{RRM}	50	100	200	300	400	600	Volts
RMS Reverse Voltage...$V_{R(rms)}$	35	70	140	210	280	420	Volts
DC Blocking Voltage...V_{DC}	50	100	200	300	400	600	Volts
Average Forward Rectified Current...$I_{F(av)}$ T_A = 55°C	..... 2.0						Amps
Non-Repetitive Peak Forward Surge Current...I_{FSM} @ Rated Current & Temp	< ..... 50 ..... >						Amps
Operating & Storage Temperature Range...T_J, T_{STRG}	..... -65 to 150						°C
Electrical Characteristics							
Maximum Forward Voltage @ 2.0A...V_F	< ..... 0.95 ..... >		< .. 1.30 .. >		1.50		Volts
Maximum DC Reverse Current...I_R T_A = 25°C	..... 2.0						µAmps
@ Rated DC Blocking Voltage T_A =150°C	..... 50						µAmps
Typical Junction Capacitance...C_J *(Note 1)*	..... 70						pF
Maximum Reverse Recovery Time...t_{RR} *(Note 2)*	< ..... 35 ..... >		< ..... 50 ..... >				ns

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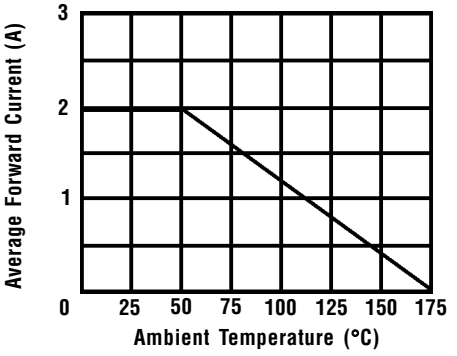
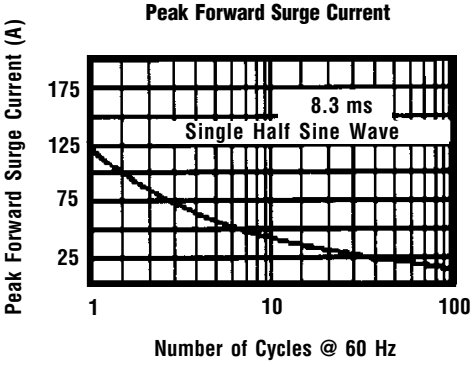
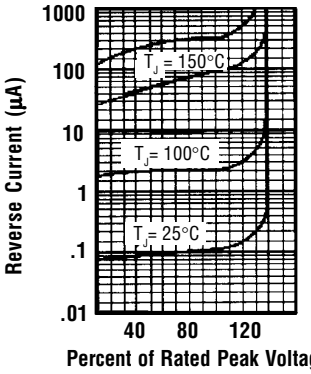
Forward Current Derating Curve



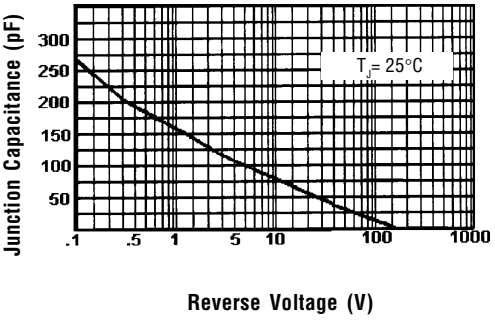
Non-Repetitive Peak Forward Surge Current



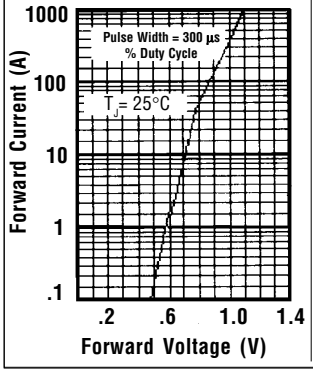
Typical Reverse Characteristics

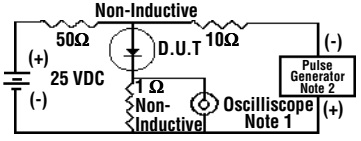


Typical Junction Capacitance



Typical Instantaneous Forward Characteristics

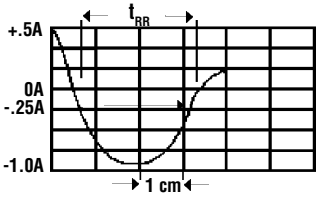




Notes:

1. Rise Time = 7 ns Max. Impedance = 1 megohm, 22 pF
2. Rise Time = 10 ns Max. Source Impedance = 50 Ohms

Reverse Recovery Characteristics



Time Base Set @ 50/100ns/cm

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. Conditions: I_F = 0.5A, I_R = 1.0A, I_{RR} = 0.25A.