FR3X SERIES

SURFACE MOUNT FAST RECOVERY RECTIFIER

产品规格确认书

FR3A THRU FR3M

SURFACE MOUNT FAST RECOVERY RECTIFIER

康 比 電 子
HORNBY ELECTRONIC

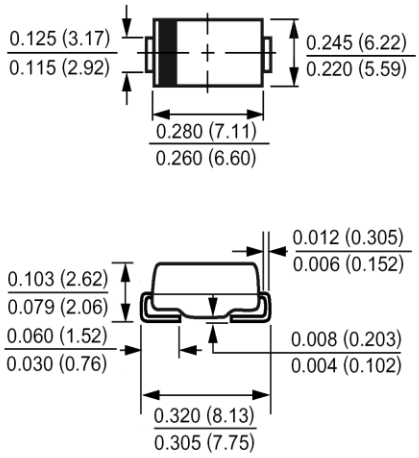
REVERSE VOLTAGE: **50 to 1000 VOLTS**

FORWARD CURRENT: **3.0 AMPERE**

FEATURES

· For surface mounted applications
· Low profile package
· Built-in strain relief
· Easy pick and place
· Fast Recovery times for high efficiency
· Plastic package has Underwriters Laboratory Flammability Classification 94V-O
· High temperature soldering : 260°C /10 seconds at terminals

DO214-AB(SMC)



Dimensions in inches and (millimeters)

MECHANICAL DATA

Case: Molded plastic, DO-214AB(SMC)
Terminals: Solder plated, solderable per MIL-STD-750, method 2026 guaranteed
Polarity: Color band denotes cathode end
Packaging: 16mm tape per EIA STD RS-481
Weight: 0.007 ounce, 0.21 gram

Maximum Ratings and Electrical Characteristics

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

	Symbols	*FR3A*	*FR3B*	*FR3D*	*FR3G*	*FR3J*	*FR3K*	*FR3M*	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	**Volts**
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	**Volts**
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	**Volts**
Maximum Average Forward Rectified Current at T_L=75C	$I_{(AV)}$	3.0							**Amp**
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	100							**Amp**
Maximum Forward Voltage at 3.0A	V_F	1.3							**Volts**
Maximum Reverse Current at T_A=25C	I_R	5.0							**µAmp**
at Rated DC Blocking Voltage T_A=125C		300							
Typical Junction Capacitance (Note 1)	C_J	60							**pF**
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	50							**C/W**
	$R_{\theta JL}$	15							
Maximum Reverse Recovery Time (Note 3)	T_{RR}	150				250	500		**nS**
Operating Junction Temperature Range	T_J	-55 to +150							**C**
Storage Temperature Range	Tst	-55 to +150							**C**

NOTES:

1- Measured at 1 MH_Z and applied reverse voltage of 4.0 VDC.
2- Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.3 x 0.3" (8.0 x 8.0mm) copper pad areas
3- Reverse Recovery Test Conditions: I_F=.5A, I_R=1A, I_{RR}=.25A.

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RATINGS AND CHARACTERISTIC CURVES

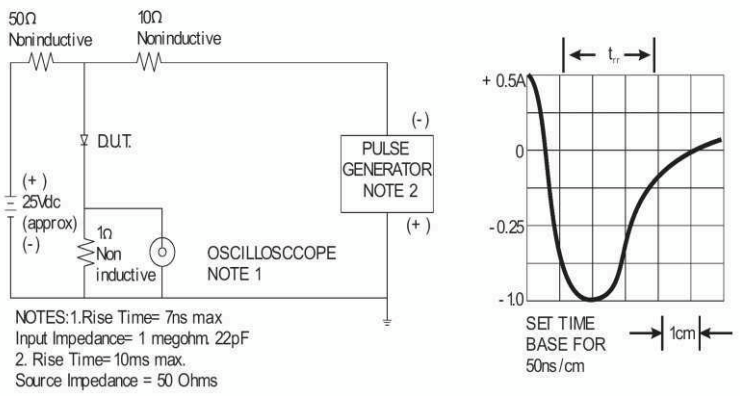

Fig.1-REVERSERECOVERY TIMECHARACTERISTIC AND TEST CIRCUITDIAGRAM

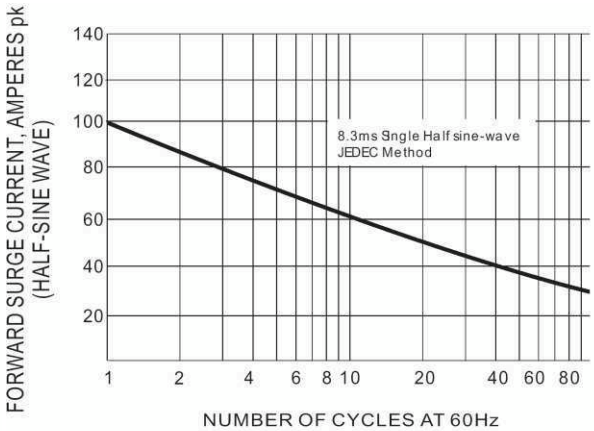

Fig.2-MAXIMUM NON-REPEITIVE SURGE CURRENT

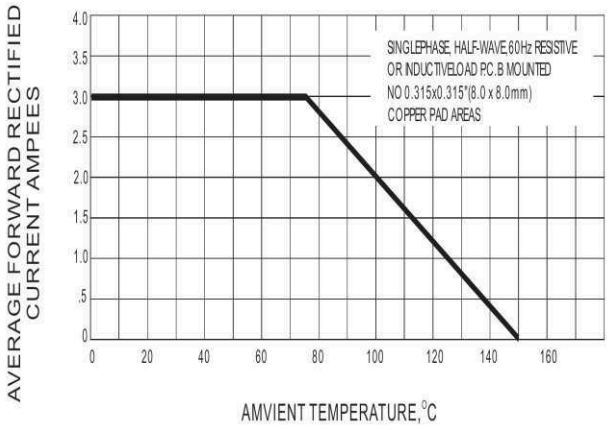

Fig. 3-MAXIMU AVERAGE FORWARD CURRENT RATING

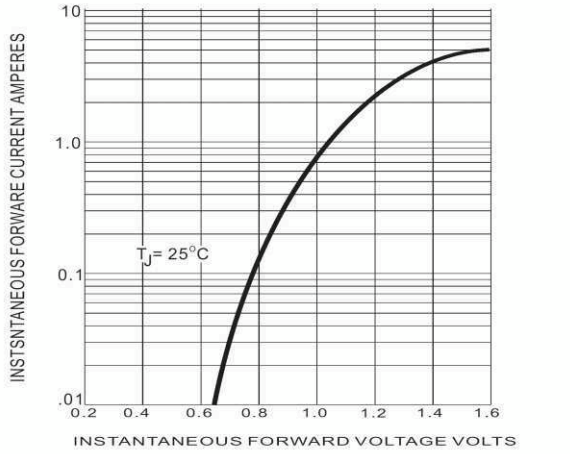

Fig. 4- FORWARD CURRRENT DERATING CUR\

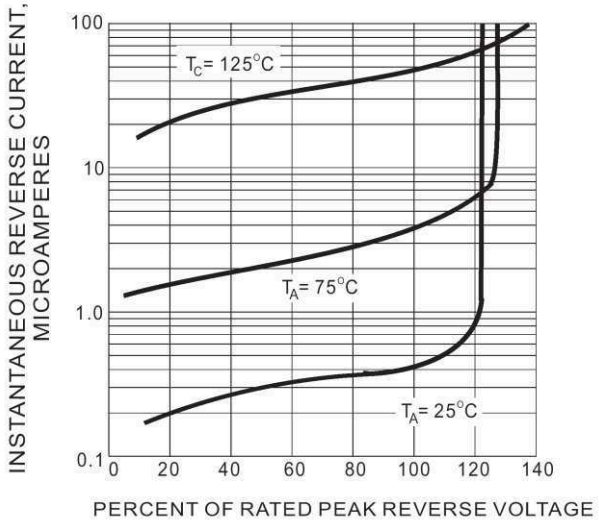

Fig. 5-TYPICAL REVERSE CHARACTERISTICS

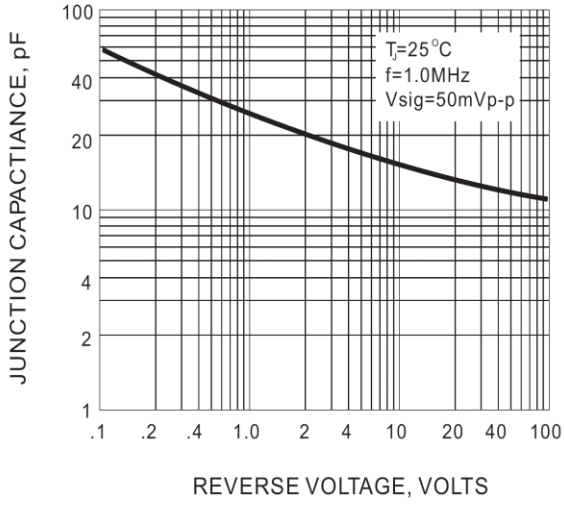

Fig.6- TYPICAL JUNCTION CAPACITANC