



**TECHNICAL SPECIFICATIONS OF SURFACE MOUNT
MOUNT ULTRA FAST RECTIFIER**

UF3A-UF3K

VOLTAGE RANGE - 50 to 800 Volts

CURRENT - 3.0 Amperes

■ CY professional brand identity



L	CY
Model	UF3 <u>X</u>

■ Package Outline

Model SMC DO-214AB	DIM	SMC(DO-214AB)			
		Millimeters		Inches	
		Min	Max	Min	Max
	A	6.60	7.11	0.260	0.280
	B	5.59	6.22	0.220	0.245
	C	2.75	3.25	0.108	0.128
	D	7.75	8.13	0.305	0.320
	E	2.00	2.62	0.078	0.103
	F	0.76	1.52	0.030	0.060
	G	0.152	0.305	0.006	0.012
	H	0.051	0.203	0.002	0.008



FEATURES

- * Ideal for surface mounted applications
- * Low leakage current
- * Glass passivated junction

MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- * Polarity: As marked
- * Mounting position: Any
- * Weight: 0.24 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	SYMBOL	UF3A	UF3B	UF3D	UF3G	UF3J	UF3K	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	800	Volts
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	Volts
Maximum DC Blocking Voltage	Vdc	50	100	200	400	600	800	Volts
Maximum Average Forward Rectified Current TA = 75°C	Io	3.0						Amps
Peak Forward Surge Current IFM(surge): 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	100						Amps
Maximum Forward Voltage at 3.0A DC	VF	1.0		1.4	1.7			Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	@ TA = 25°C	10						uAmps
	@ TA = 125°C	300						
Maximum Reverse Recovery Time (Note 3)	trr	50						nSec
Typical Thermal Resistance (Note 2)	RθJL	10						°C/W
Typical Junction Capacitance (Note 1)	Cj	60						pF
Operating and Storage Temperature Range	TJ, TSTG	-65 to + 175						°C

NOTES : 1. Measured at 1.0 MHz and applied average voltage of 4.0VDC
 2. Thermal Resistance (Junction to Ambient), 0.2x0.2in² (5X5mm²)copper pads to each terminal.
 3. Test Conditions: IF=0.5A, IR=1.0A, IRR=0.25A.



RATING AND CHARACTERISTIC CURVES (UF3A THRU UF3K)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

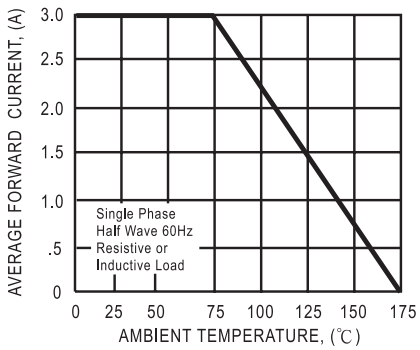


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

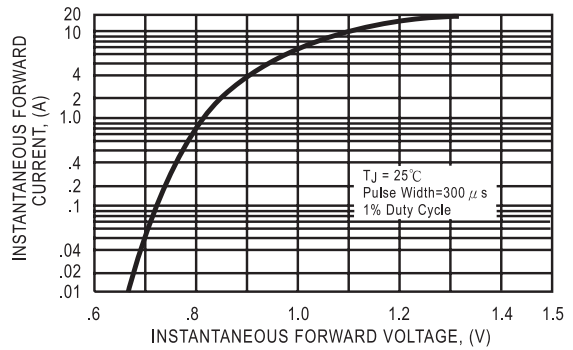


FIG. 3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

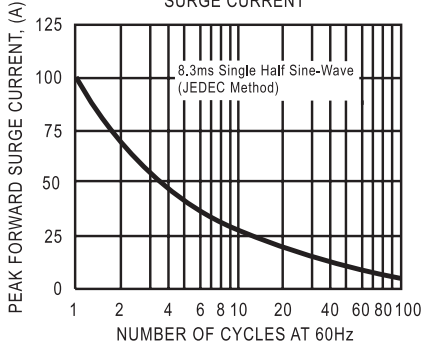


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

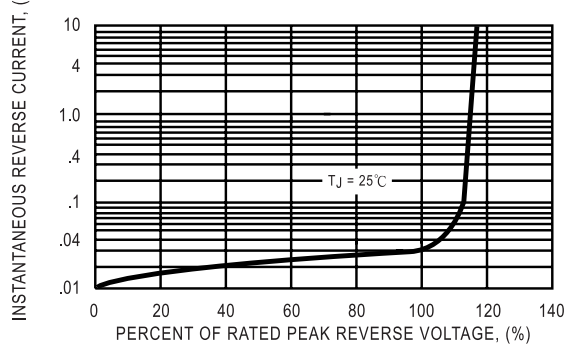


FIG. 5 - TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC

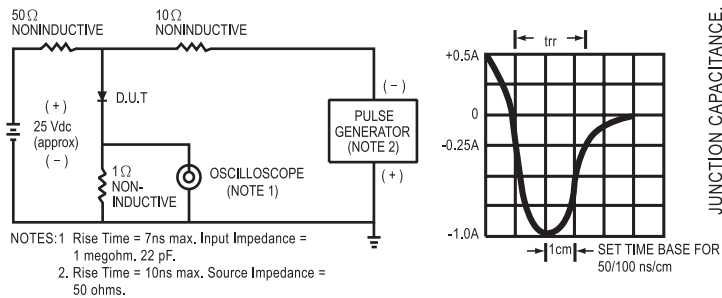


FIG. 6 - TYPICAL JUNCTION CAPACITANCE

