

Ultra Super Fast Recovery Diodes

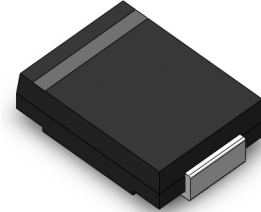
UF5AC~UF5MC
5.0A
DO-214AB(SMC)

Features

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ Idea for printed circuit board
- ◆ Glass passivated junction chip
- ◆ Low reverse leakage
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed 260 °C /10 seconds at terminals

Mechanical Data

- ◆ Case : Molded plastic body
- ◆ Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
- ◆ Polarity : Polarity symbol marking on body
- ◆ Mounting Position : Any
- ◆ Weight : 0.008 ounce, 0.225 grams


DO-214AB(SMC)

Maximum Ratings and Electrical Characteristics (T_A =25°C unless otherwise specified)

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

Parameter		Symbol	UF5AC	UF5BC	UF5DC	UF5GC	UF5JC	UF5KC	UF5MC	Unit
Maximum repetitive peak reverse voltage		V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage		V _{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage		V _{DC}	50	100	200	400	600	800	1000	V
Maximum average forward rectified current		I _(AV)	5.0							A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load		I _{FSM}	150.0							A
Maximum instantaneous forward voltage at 5.0A		V _F	1.0			1.4	1.7			V
Maximum DC reverse current at rated DC blocking voltage	@ T _A = 25℃	I _R	2.0							μA
	@ T _A = 125℃		200							
Maximum reverse recovery time (Note 1)		T _{rr}	50				75			ns
Typical junction capacitance (Note2)		C _J	75							pF
Typical thermal resistance		R _{qJA}	47							℃/W
Operating junction and storage temperature range		T _J ,T _{STG}	-55 to +150							℃

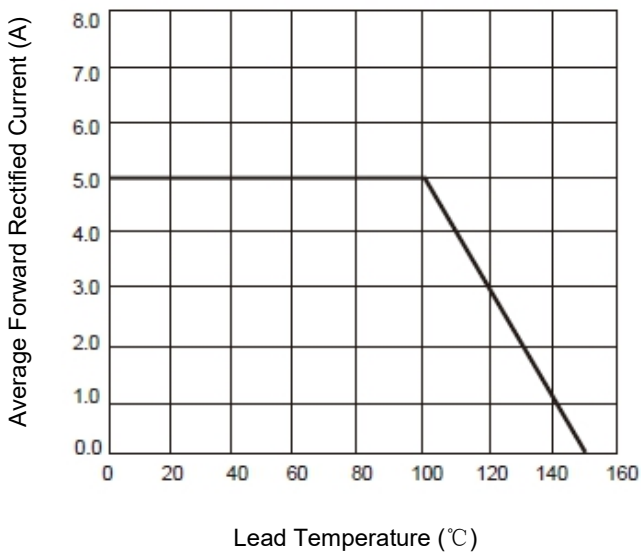
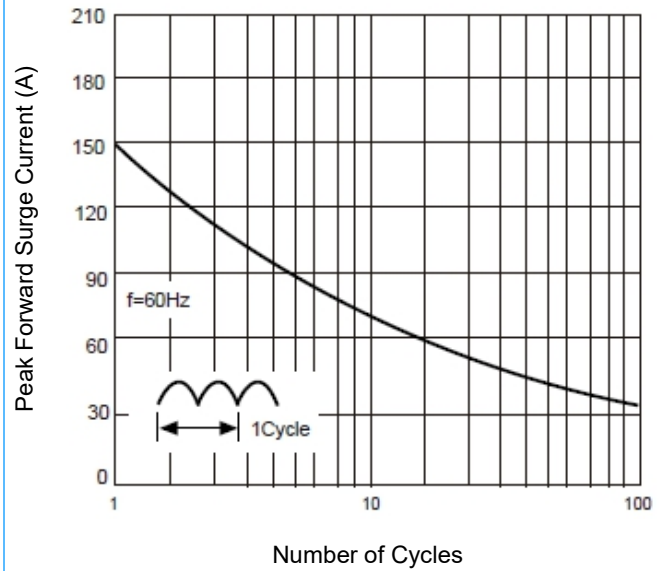
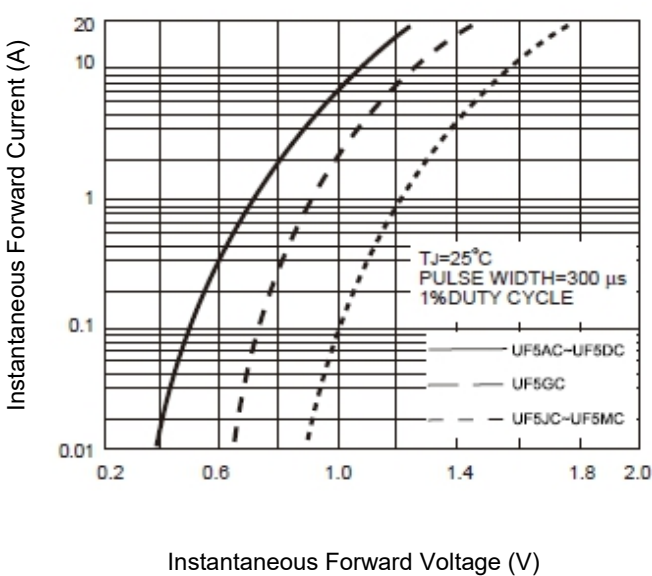
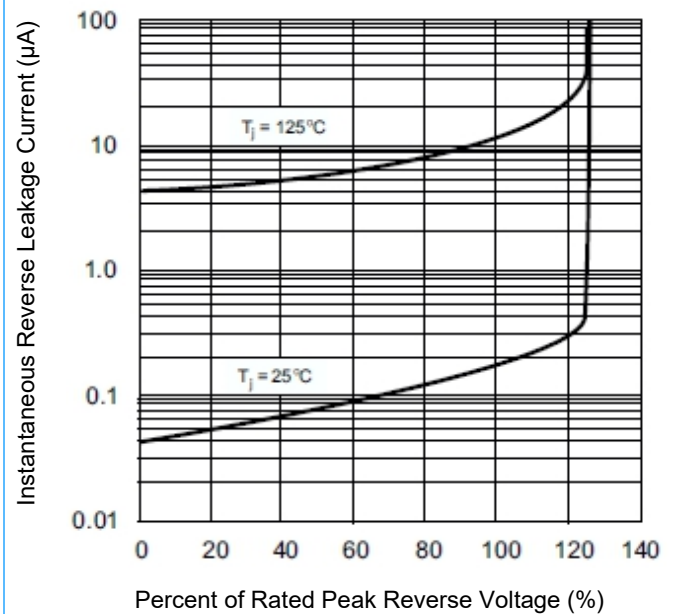
Notes: 1. Reverse recovery time test condition: I_F=0.5A, I_R=1.0A, I_{rr}=0.25A.

2. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

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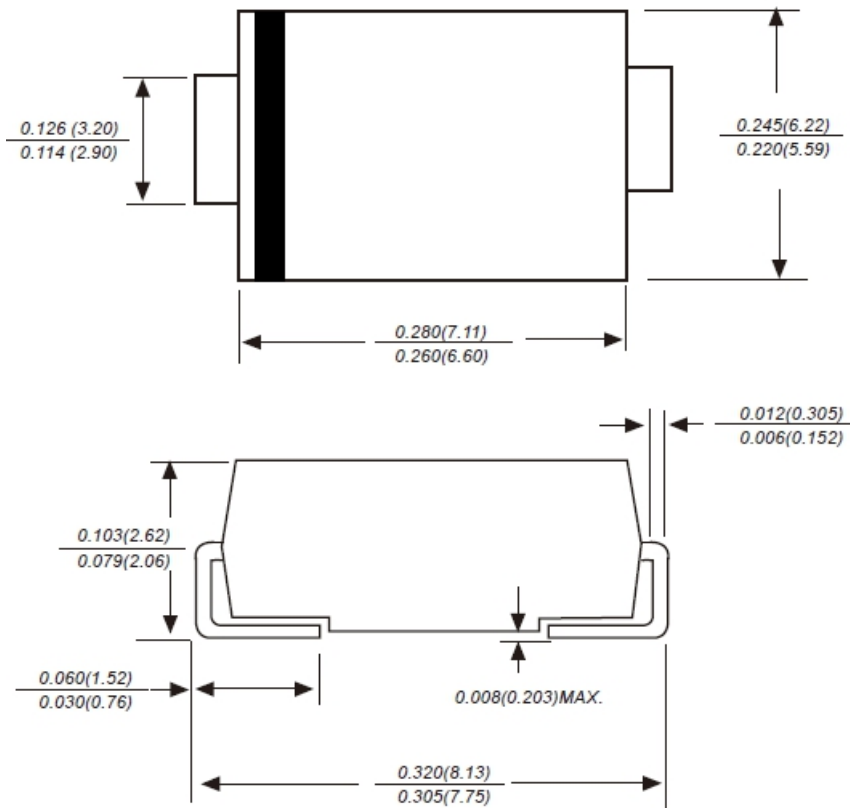
Rating and Characteristic Curves

Fig.1. Derating Curve Output Rectified Current

Fig.2. Maximum Non-Repetitive Peak Forward Surge Current Perleg

Fig.3. Typical Forward Voltage Characteristics

Fig.4. Typical Reverse Leakage Characteristics


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DO-214AB(SMC) Package Outline (Unit: mm)



Packaging Information

Part Number	Component Package	Quantity
UF5AC~UF5MC	DO-214AB(SMC)	3000 PCS/REEL

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