



SURFACE MOUNT ULTRA FAST RECOVERY RECTIFIER

US3A - US3M



**DO-214AB(SMC)
Surface Mount Package**

Ultrafast Recovery times for High Efficiency

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

DESCRIPTION	SYMBOL	US3A	US3B	US3D	US3G	US3J	US3K	US3M	UNIT	
Maximum Peak Repetitive 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 at $T_L=55^\circ\text{C}$	$I_{(AV)}$	3.0							A	
Peak Forward Surge Current 8.3ms 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	100.0							A	
Maximum Forward Voltage at $I_F=3\text{A}$	V_F	1.0			1.4	1.7			V	
Maximum DC Reverse Current $T_a=25^\circ\text{C}$ at Rated DC Blocking Voltage $T_a=100^\circ\text{C}$	I_R	5.0				100				uA
Typical Junction Capacitance	$*C_J$	75				63				pF
Typical Thermal Resistance Junction to Lead	$**R_{th(j-L)}$	47							$^\circ\text{C/W}$	
Maximum Reverse Recovery Time	$***T_{RR}$	50				100				ns
Operating Junction Temperature Range	T_j	- 65 to +150							$^\circ\text{C}$	
Storage Temperature Range	T_{stg}	- 65 to +150							$^\circ\text{C}$	

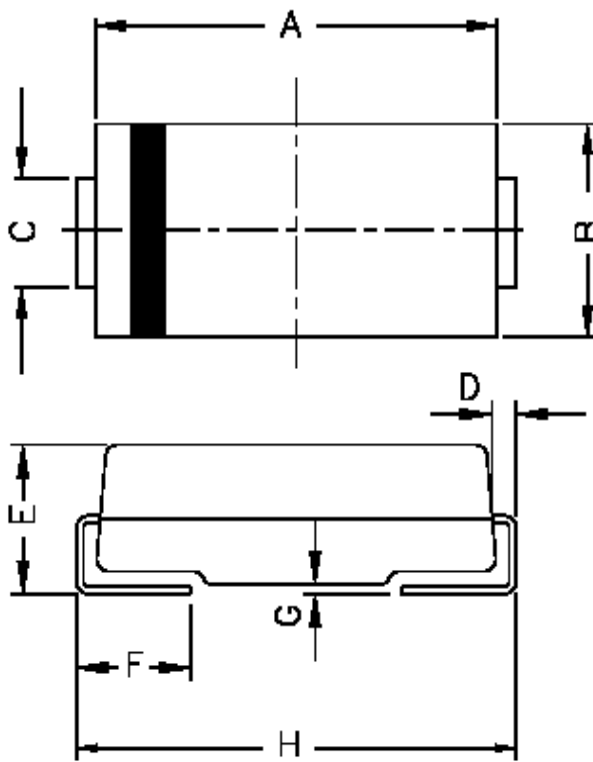
*Measured at 1MHz and applied reverse voltage of 4.0 V

**Thermal resistance junction to Lead mounted on PCB with 0.2 x 0.2" (5 x 5 mm) copper pad areas

***Reverse recovery test conditions $I_F=0.5\text{A}$, $I_R=1\text{A}$, $I_{RR}=0.25\text{A}$

Package Dimension

PACKAGE DO-214AB (SMC)



DIM	MIN.	MAX.
A	6.60	7.11
B	5.59	6.22
C	2.75	3.25
D	0.152	0.305
E	2.00	2.62
F	0.76	1.27
G	0.051	0.203
H	7.75	8.13

DIMENSIONS ARE IN mm

PACKING:- 1.8K / REEL(7" 178mm)

PACKING:- 7.5K / REEL(13" 330mm)



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