



# SK52CH THRU SK520CH

## SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

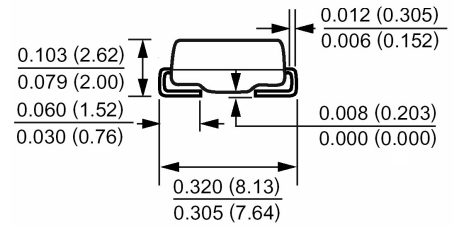
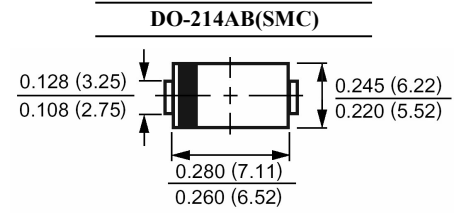
**REVERSE VOLTAGE:** 20 to 200 VOLTS  
**FORWARD CURRENT:** 5.0 AMPERE

### FEATURES

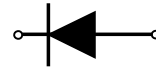
- For surface mounted applications
- High current capacity
- High surge capacity
- Low power loss, high efficiency
- Suffix " H " indicated Halogen-free part, ex.SK52CH

### 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



Dimensions in inches and (millimeters)



### Maximum Ratings and Electrical Characteristics

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

Parameter	Symbols	SK52CH	SK54CH	SK55CH	SK56CH	SK58CH	SK510CH	SK515CH	SK520CH	Units	
		SK52	SK54	SK55	SK56	SK58	SK510	SK515	SK520		
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	20	40	50	60	80	100	150	200	Volts	
Maximum RMS Voltage	V <sub>RMS</sub>	14	28	35	42	56	70	105	140	Volts	
Maximum DC Blocking Voltage	V <sub>DC</sub>	20	40	50	60	80	100	150	200	Volts	
Maximum Average Forward Rectified Current at T <sub>L</sub> (See Fig. 1)	I <sub>(AV)</sub>	5.0								Amp	
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	100.0								Amp	
Maximum Forward Voltage at 5.0A (Note 1)	V <sub>F</sub>	0.55		0.70		0.85		0.95		Volts	
Maximum Reverse Current at T <sub>A</sub> =25°C at Rated DC Blocking Voltage T <sub>A</sub> =100°C	I <sub>R</sub>		0.5				0.2			mAmp	
			20.0				10.0				
Typical Thermal Resistance from Junction to Lead (Note 2)	R <sub>θJL</sub>	20								°C/W	
Operating Junction Temperature Range	T <sub>J</sub>	-55 to +125				-55 to +150				°C	
Storage Temperature Range	T <sub>stg</sub>	-55 to +150									°C

**NOTES:**

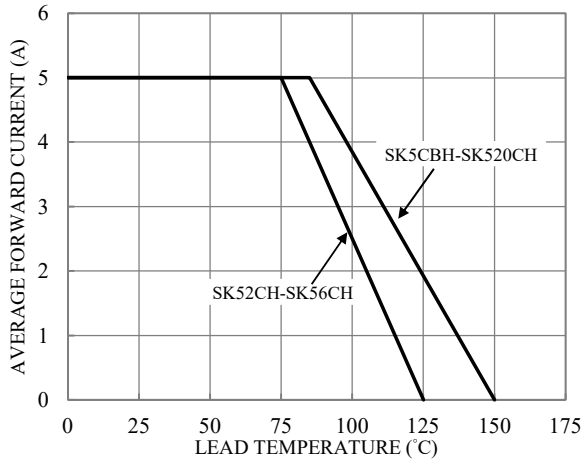
- 1- Pulse test: 300µs pulse width, 1% duty cycle
- 2-Mounted on P.C.B. with 0.31"×0.31" (8×8mm) copper pad areas.



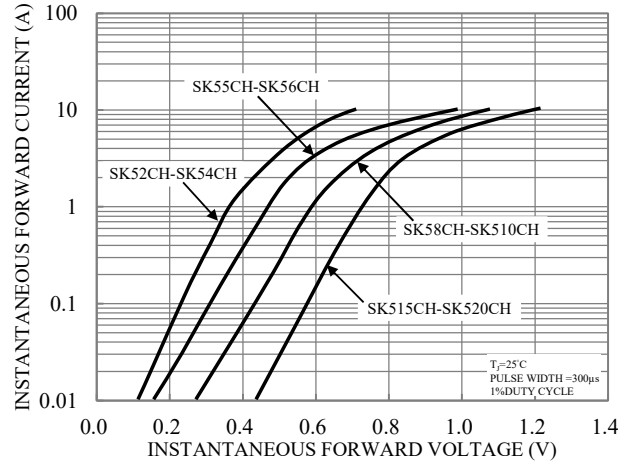
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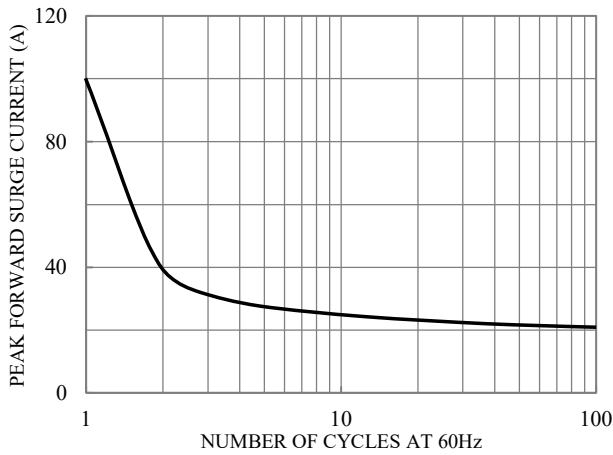
### RATINGS AND CHARACTERISTIC CURVES



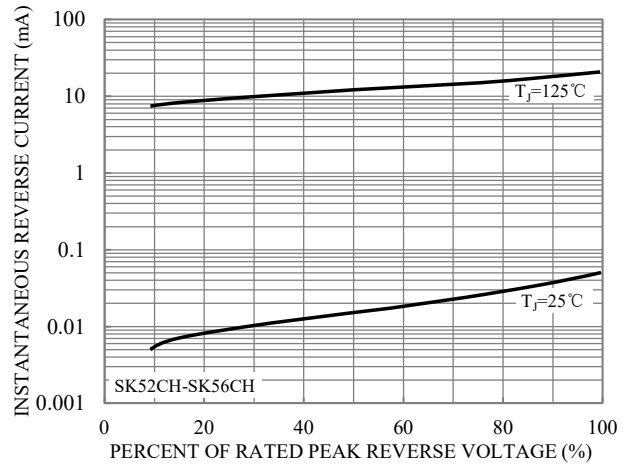
**Fig.1-FORWARD CURRENT DERATING CURVE**



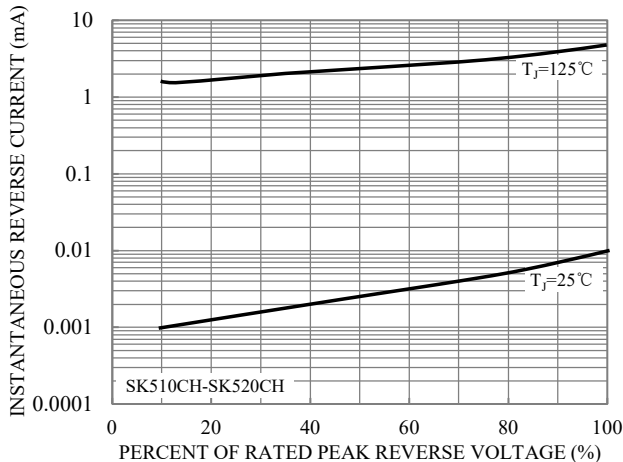
**Fig.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**



**Fig.3-MAXIMUM NON-REPETITIVE SURGE CURRENT**



**Fig.4-TYPICAL REVERSE CHARACTERISTICS**



**Fig.5-TYPICAL REVERSE CHARACTERISTICS**