



SK52CH THRU SK520CH

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

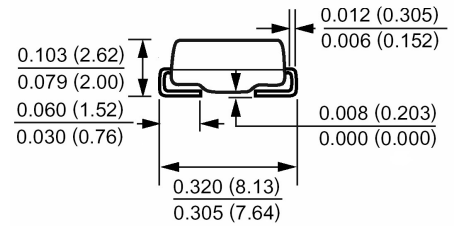
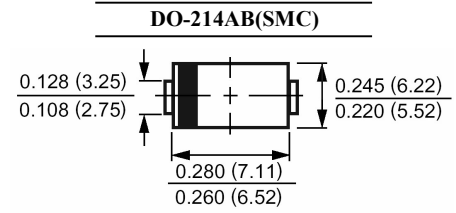
REVERSE VOLTAGE: 20 to 200 VOLTS
FORWARD CURRENT: 5.0 AMPERE

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_{RRM}	20	40	50	60	80	100	150	200	Volts
Maximum RMS Voltage	V_{RMS}	14	28	35	42	56	70	105	140	Volts
Maximum DC Blocking Voltage	V_{DC}	20	40	50	60	80	100	150	200	Volts
Maximum Average Forward Rectified Current at T_L (See Fig. 1)	$I_{(AV)}$	5.0								Amp
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	100.0								Amp
Maximum Forward Voltage at 5.0A (Note 1)	V_F	0.55		0.70		0.85		0.95		Volts
Maximum Reverse Current at $T_A=25^\circ\text{C}$ at Rated DC Blocking Voltage $T_A=100^\circ\text{C}$	I_R	0.5				0.2				mAmp
		20.0				10.0				
Typical Thermal Resistance from Junction to Lead (Note 2)	$R_{\theta JL}$	20								°C/W
Operating Junction Temperature Range	T_J	-55 to +125				-55 to +150				°C
Storage Temperature Range	T_{stg}	-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

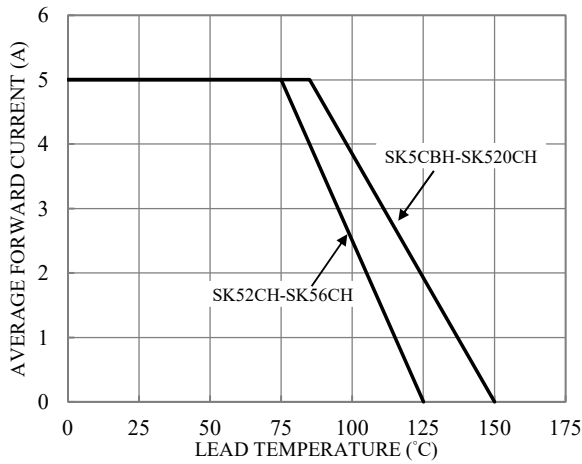


Fig.1-FORWARD CURRENT DERATING CURVE

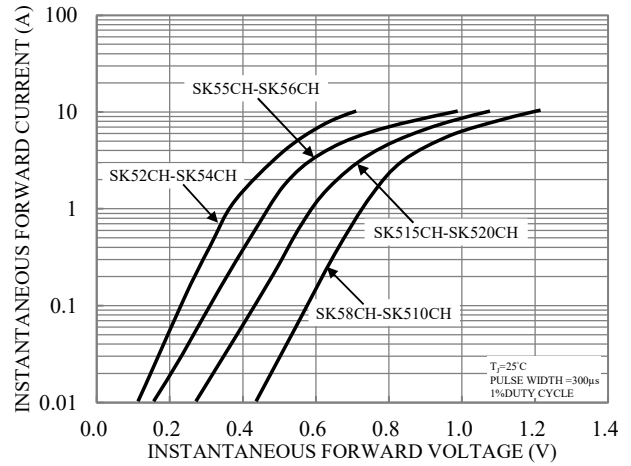


Fig.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

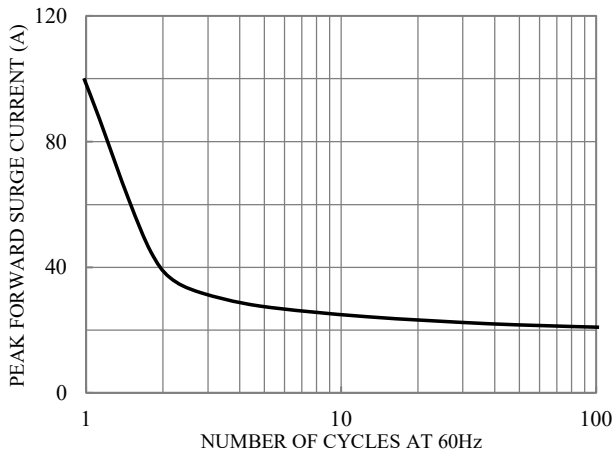


Fig.3-MAXIMUM NON-REPETITIVE SURGE CURRENT

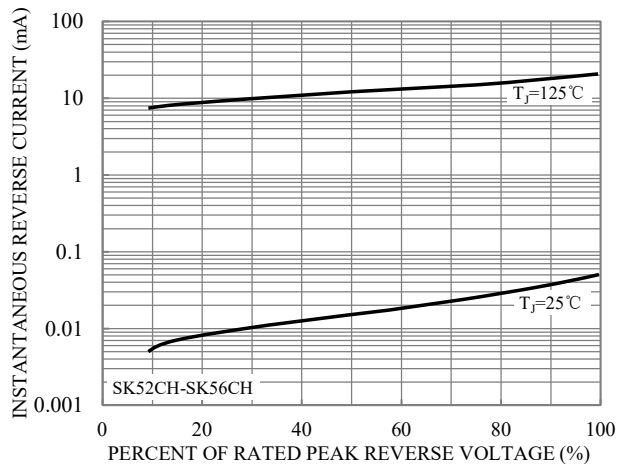


Fig.4-TYPICAL REVERSE CHARACTERISTICS

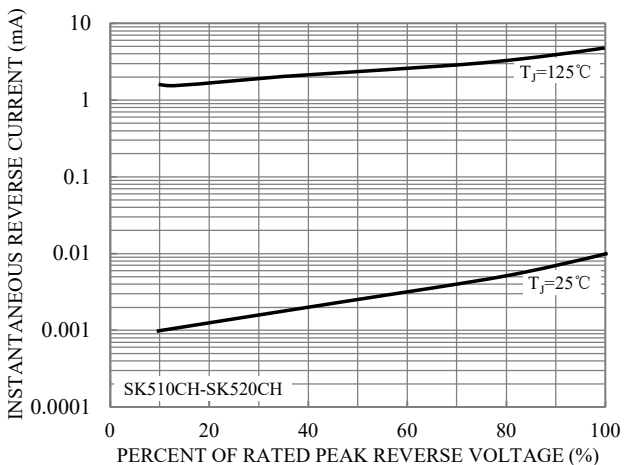


Fig.5-TYPICAL REVERSE CHARACTERISTICS