Elektronische Bauelemente

SK1045CL

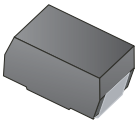
Voltage 45V
Low VF & Low IR
10.0 Amp Schottky Barrier Rectifiers

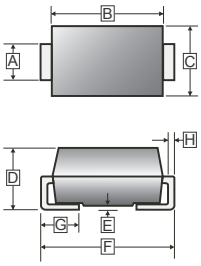
RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

- Ideal for surface mount applications
- Easy pick and place
- Built-in strain relief
- Super Low V_F & Low I_R

SMC





MECHANICAL DATA

- Case：Molded Plastic
- Epoxy：UL 94V-0 Rate Flame Retardant
- Terminals: Lead Free Plating (Tin Finish). Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band

PACKAGE INFORMATION

Package	MPQ	Leader Size
SMC	3K	13 inch

REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	2.75	3.15	E	-	0.203
B	6.60	7.11	F	7.75	8.13
C	5.59	6.22	G	0.76	1.27
D	2.00	2.62	H	0.15	0.31

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Rating 25°C ambient temperature unless otherwise specified. Single phase half wave, 60Hz, resistive or inductive load.
For capacitive load, de-rate current by 20%.)

Parameter		Symbol	Rating	Unit
Peak Repetitive Peak reverse voltage		V_{RRM}	45	V
Maximum RMS voltage		V_{RMS}	31.5	V
Maximum DC Blocking Voltage		V_{DC}	45	V
Maximum Average Forward Current		I_F	10	A
Peak Forward Surge Current @ 8.3 ms Half Sine-Wave superimposed on rated load (JEDEC method)		I_{FSM}	150	A
Maximum Instantaneous Forward Voltage @ I_F=10A		V_F	0.47	V
Maximum DC Reverse Current At Rated DC Blocking Voltage	T_C= 25°C	I_R	0.5	mA
	T_C= 100°C		30	
Typical Junction Capacitance [1]		C_J	800	pF
Typical Thermal Resistance		$R_{\theta JA}$	60	°C / W
Typical Thermal Resistance		$R_{\theta JC}$	30	°C / W
Operating Temperature Range		T_J	-55~125	°C
Storage temperature		T_{STG}	-55~150	°C

Notes:
1.Measured at 1.0MHZ and applied reverse voltage of 4.0V DC
2.Device mounted on FR-4 substrate, 1"*1", 2oz, single-sided, PC boards with 0.15"*0.26" copper pad.

Elektronische Bauelemente

SK1045CL

Voltage 45V
Low VF & Low IR
10.0 Amp Schottky Barrier Rectifiers

CHARACTERISTIC CURVES

FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

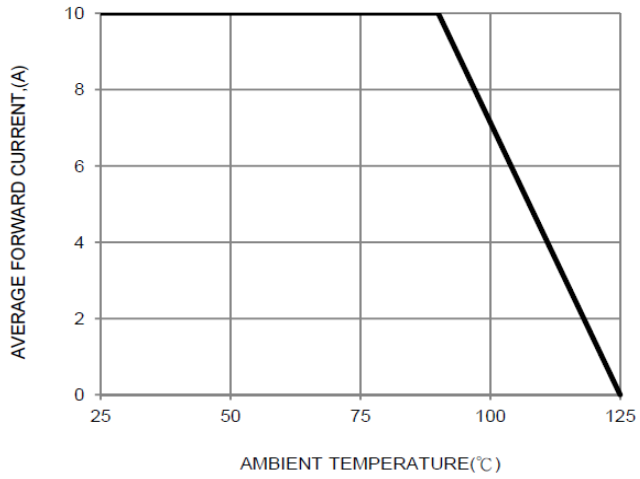


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

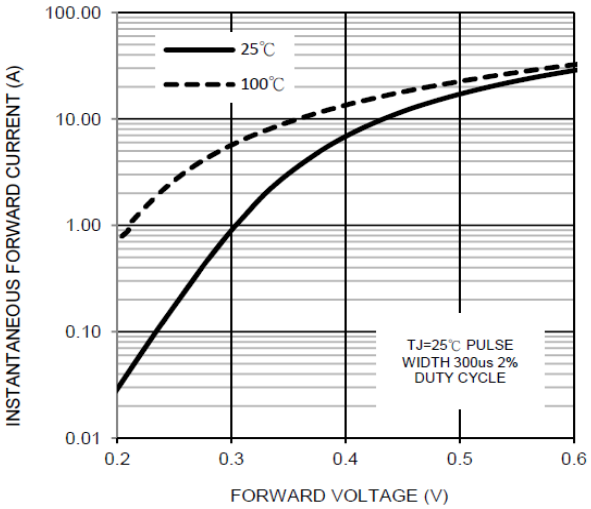


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

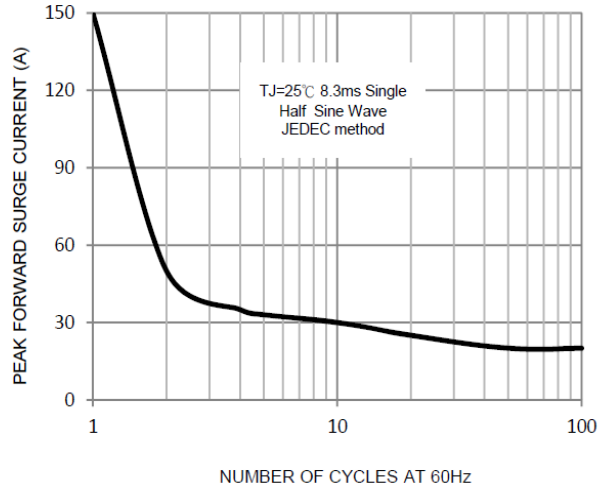


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

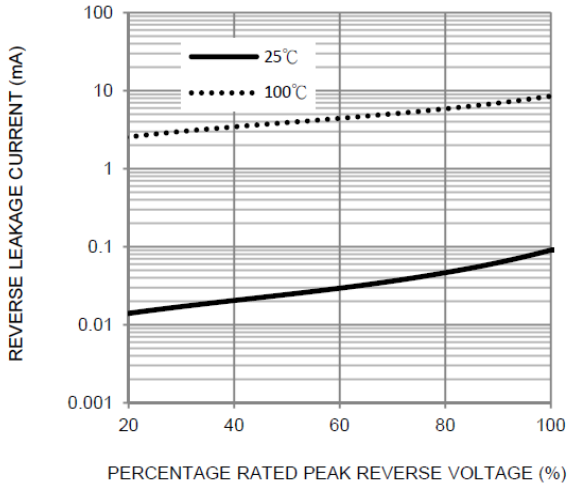


FIG. 5-TYPICAL JUNCTION CAPACITANCE