

M·C·C·

Micro Commercial Components



Micro Commercial Components
20736 Marilla Street Chatsworth
CA 91311
Phone: (818) 701-4933
Fax: (818) 701-4939

Features

- High Surge Capability
- Very low forward voltage drop
- Halogen free available upon request by adding suffix "-HF"
- Low power losses, high efficiency
- Guardring for overvoltage protection
- Lead Free Finish/RoHS Compliant (Note 1) ("P" Suffix designates RoHS Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

Maximum Ratings

- Operating Temperature: -55°C to $+125^{\circ}\text{C}$
- Storage Temperature: -55°C to $+150^{\circ}\text{C}$
- Maximum Thermal Resistance: 140°C/W Junction To Lead
 50°C/W Junction To Ambient

MCC Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
SK42L	SK42L	20V	14V	20V
SK43L	SK43L	30V	21V	30V
SK44L	SK44L	40V	28V	40V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	4.0A	$T_L = 90^{\circ}\text{C}$
Peak Forward Surge Current	I_{FSM}	150A	8.3ms, half sine
Maximum Instantaneous Forward Voltage*	V_F	.45V	$I_{FM} = 4.0\text{A}; T_A = 25^{\circ}\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage*	I_R	0.5mA 35mA	$T_A = 25^{\circ}\text{C}$ $T_A = 100^{\circ}\text{C}$

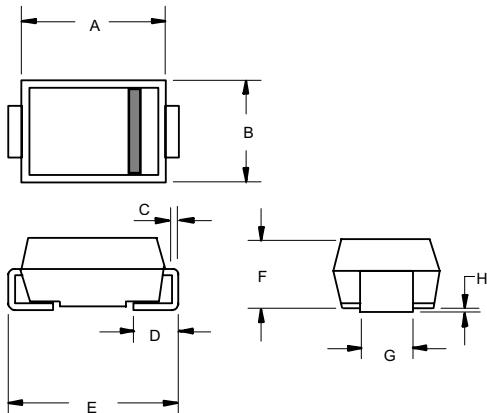
*Pulse test: Pulse width 300 μsec , Duty cycle 1%

Notes: 1. High Temperature Solder Exemption Applied, see EU Directive Annex 7.

**SK42L
THRU
SK44L**

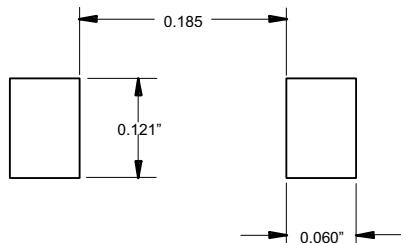
**4 Amp Schottky
Rectifier
20 to 40 Volts**

**DO-214AB
(SMC) (LEAD FRAME)**



DIM	DIMENSIONS				NOTE
	INCHES	MIN	MAX	MM	
A	.260	.280		6.60	7.11
B	.220	.245		5.59	6.22
C	.006	.012		0.15	0.31
D	.030	.060		0.76	1.52
E	.305	.320		7.75	8.13
F	.079	.103		2.00	2.62
G	.108	.128		2.75	3.25
H	.002	.008		0.050	0.203

SUGGESTED SOLDER PAD LAYOUT

**www.mccsemi.com**

SK42L thru SK44L

•M•C•C•

Micro Commercial Components

RATINGS AND CHARACTERISTICS CURVES

($T_A = 25^\circ\text{C}$ unless otherwise noted)

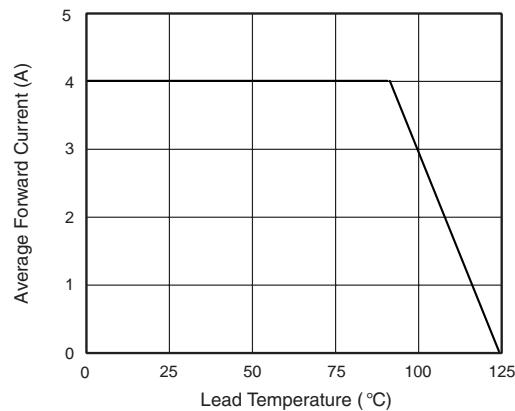


Figure 1. Forward Current Derating Curve

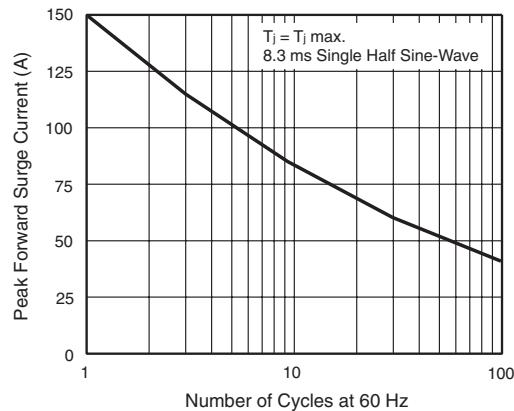


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

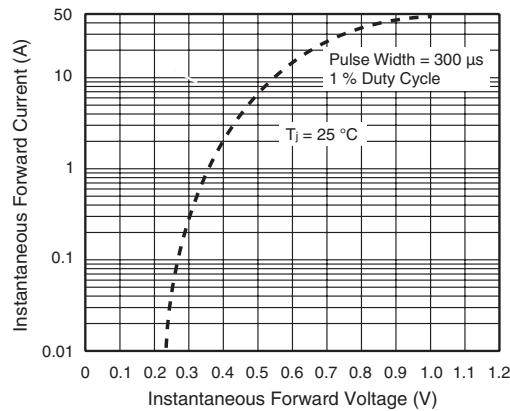


Figure 3. Typical Instantaneous Forward Characteristics

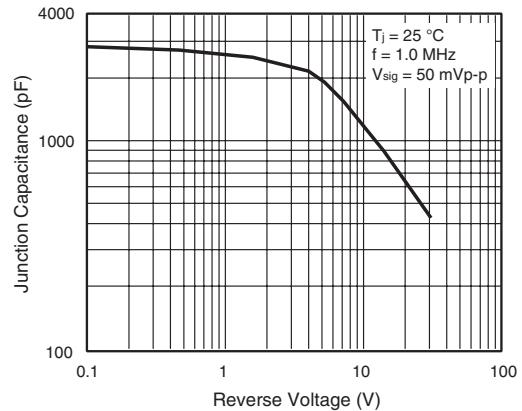


Figure 5. Typical Junction Capacitance

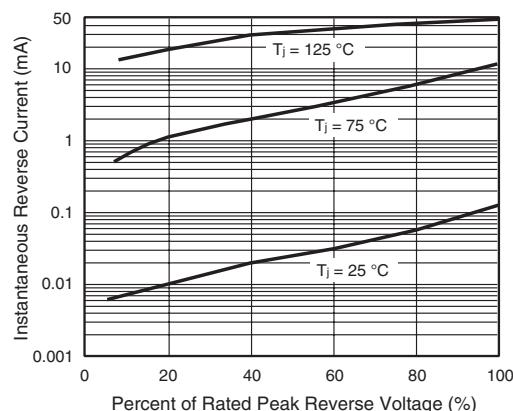


Figure 4. Typical Reverse Characteristics

TM

Micro Commercial Components

Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/Reel

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

IMPORTANT NOTICE

Micro Commercial Components Corp. reserves the right to make changes without further notice to any product herein to make corrections, modifications , enhancements , improvements , or other changes . **Micro Commercial Components Corp.** does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights ,nor the rights of others . The user of products in such applications shall assume all risks of such use and will agree to hold **Micro Commercial Components Corp.** and all the companies whose products are represented on our website, harmless against all damages.

LIFE SUPPORT

MCC's products are not authorized for use as critical components in life support devices or systems without the express written approval of Micro Commercial Components Corporation.

CUSTOMER AWARENESS

Counterfeiting of semiconductor parts is a growing problem in the industry. Micro Commercial Components (MCC) is taking strong measures to protect ourselves and our customers from the proliferation of counterfeit parts. MCC strongly encourages customers to purchase MCC parts either directly from MCC or from Authorized MCC Distributors who are listed by country on our web page cited below. Products customers buy either from MCC directly or from Authorized MCC Distributors are genuine parts, have full traceability, meet MCC's quality standards for handling and storage. **MCC will not provide any warranty coverage or other assistance for parts bought from Unauthorized Sources.** MCC is committed to combat this global problem and encourage our customers to do their part in stopping this practice by buying direct or from authorized distributors.