

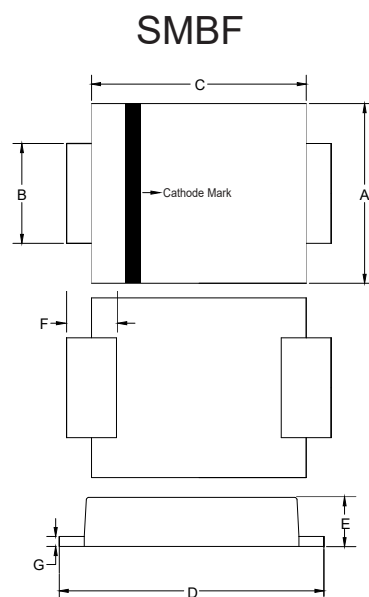
## Features

- Halogen Free. "Green" Device (Note 1)
- For Surface Mount Applications
- Very Low Profile
- High Surge Capability
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- Lead Free Finish/RoHS Compliant (Note 2) ("P" Suffix Designates RoHS Compliant. See Ordering Information)

# 3 Amp Schottky Rectifier 40 to 200 Volts

## Maximum Ratings @ 25°C (Unless Otherwise Specified)

Parameter	Symbol	Value				Unit
		SK34BFL	SK36BFL	SK310BFL	SK320BFL	
Peak Repetitive Reverse Voltage	$V_{RRM}$	40	60	100	200	V
Working Peak Reverse Voltage	$V_{RWM}$					
DC Blocking Voltage	$V_R$					
RMS Reverse Voltage	$V_{RMS}$	28	42	70	140	V
Average Rectified Forward Current	$I_{F(AV)}$	3				A
Non-Repetitive Peak Surge Current @ 8.3ms Half Sine Wave	$I_{FSM}$	70				A
Current Squared Time @ $1ms \leq t \leq 8.3ms$	$I^2t$	20.3				A <sup>2</sup> s



## Marking Code

Part Number	Marking Code
SK34BFL	SK34
SK36BFL	SK36
SK310BFL	SK310
SK320BFL	SK320

DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.134	0.150	3.40	3.80	
B	0.075	0.083	1.90	2.10	
C	0.163	0.175	4.15	4.45	
D	0.201	0.220	5.10	5.60	
E	0.041	0.061	1.05	1.55	
F	0.028	0.053	0.70	1.35	
G	0.006	0.010	0.15	0.25	

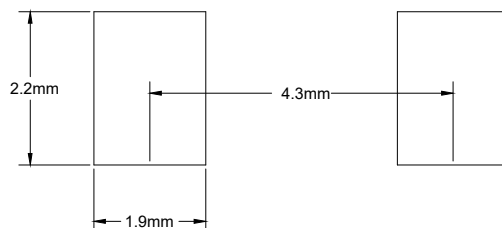
## Internal Structure

Pin	Description	Simplified Outline	Graphic Symbol
1	Cathode	<p>MCC XXXX</p> <p>XXXX = Marking Code</p>	
2	Anode		

Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

2. High temperature solder exemption applied, see EU directive annex 7a.

## Suggested Solder Pad Layout



## Thermal characteristics

Symbol	Parameter	Conditions	Min	Typ	Max	Unit
$T_J$	Operating Junction Temperature Range	SK34BFL	-55		125	°C
$T_J$	Operating Junction Temperature Range	SK36BFL~SK320BFL	-55		150	°C
$T_{stg}$	Storage Temperature Range		-55		150	°C
$R_{th(J-L)}$	Thermal Resistance from Junction to Lead	Note 1		20		°C/W
$R_{th(J-A)}$	Thermal Resistance from Junction to Ambient	Note 1		58		°C/W

Note:

1. Mounted on P.C.B. with 16 mm x 16 mm copper pad areas.

## Electrical Characteristics @ 25°C Unless Otherwise Specified

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Forward Voltage SK34BFL SK36BFL SK310BFL SK320BFL	$V_F$	$I_F=3A; T_J=25^{\circ}C$			0.50 0.70 0.85 0.90	V
Reverse Current SK34BFL~SK36BFL SK310BFL~SK320BFL	$I_R$	at Rated $V_R; T_J=25^{\circ}C$ at Rated $V_R; T_J=100^{\circ}C$ at Rated $V_R; T_J=25^{\circ}C$ at Rated $V_R; T_J=125^{\circ}C$			0.1 20 0.01 5	mA
Junction Capacitance SK34BFL SK36BFL SK310BFL SK320BFL	$C_J$	$V_R=4V; f=1MHz; T_J=25^{\circ}C$		150 130 95 60		pF

## Curve Characteristics

Fig. 1 - Forward Current Derating Curve

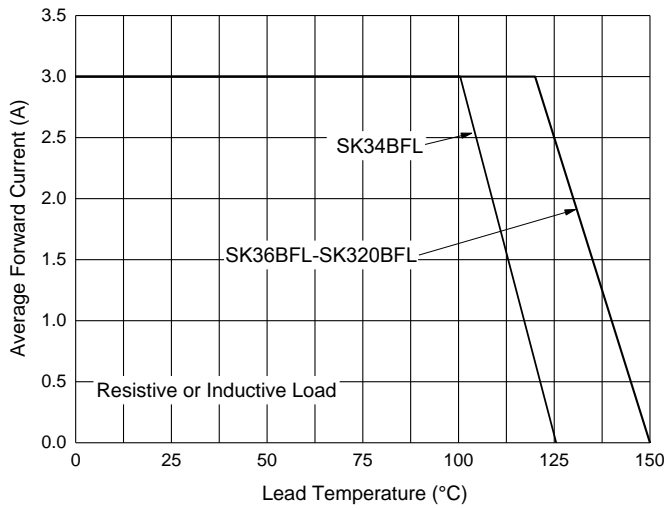


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

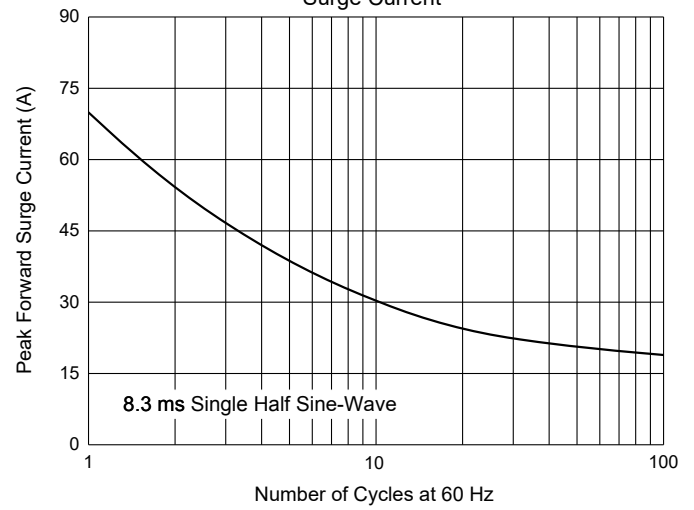


Fig. 3 - Typical Forward Characteristics

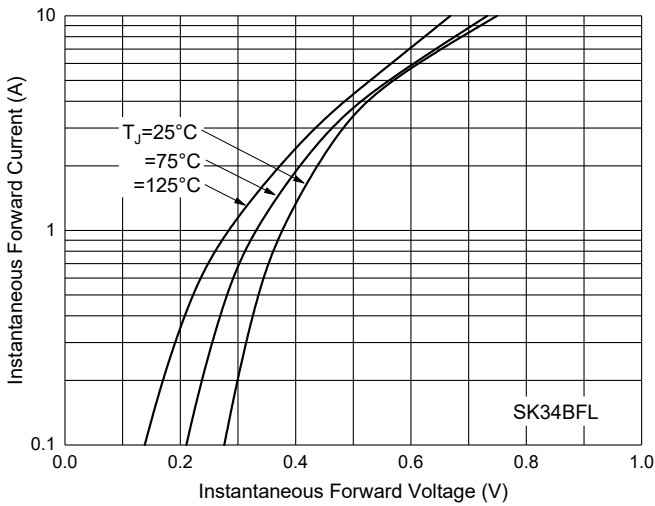


Fig. 4 - Typical Forward Characteristics

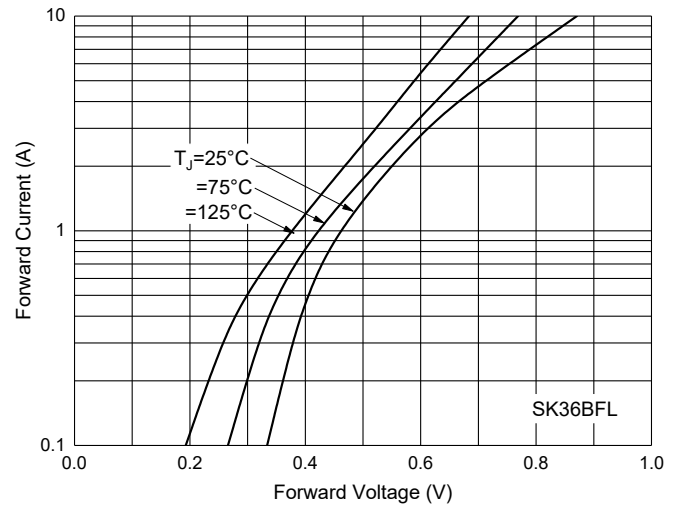


Fig. 5 - Typical Forward Characteristics

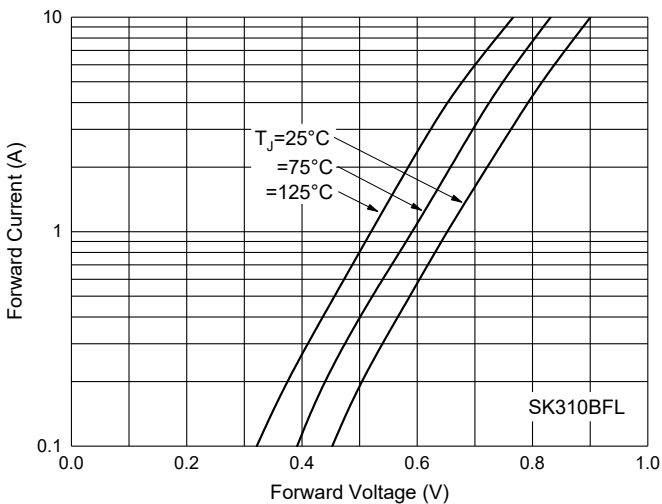
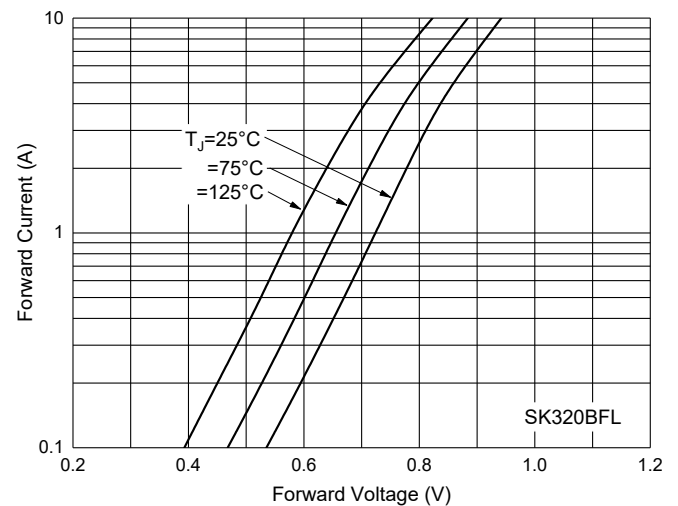


Fig. 6 - Typical Forward Characteristics



## Curve Characteristics

Fig. 7 - Typical Reverse Leakage Characteristics

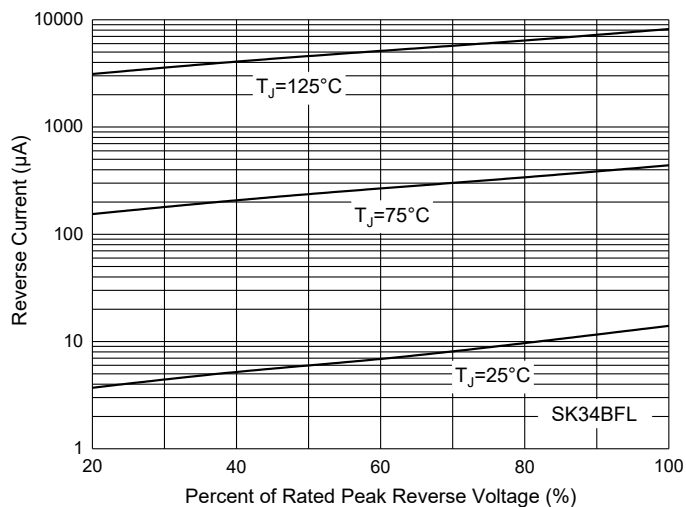


Fig. 8 - Typical Reverse Leakage Characteristics

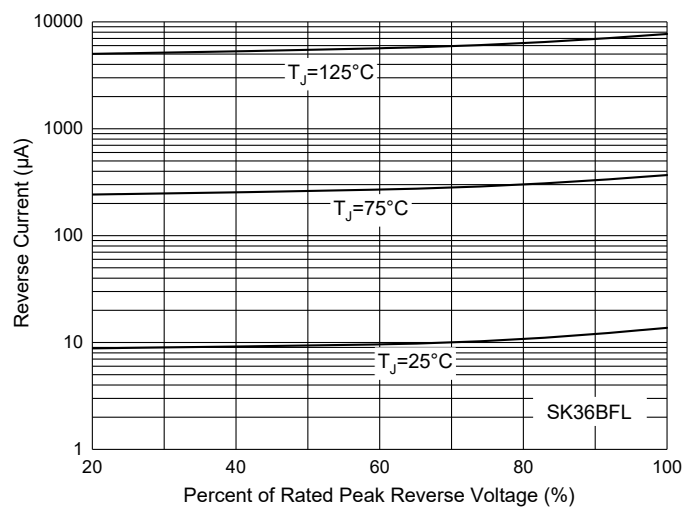


Fig. 9 - Typical Reverse Leakage Characteristics

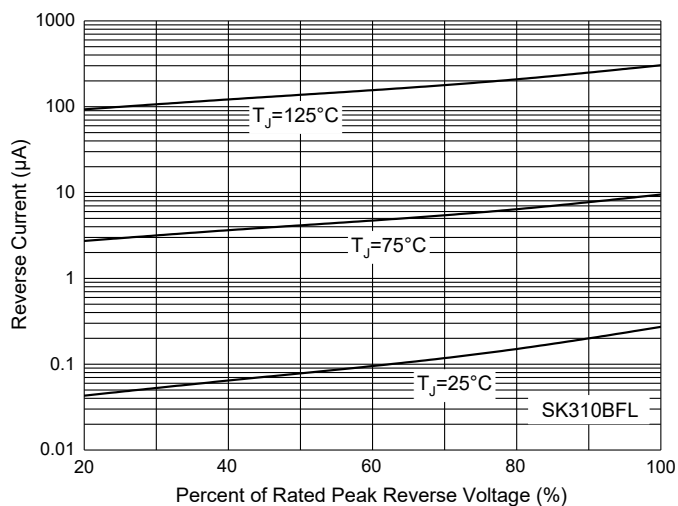


Fig. 10 - Typical Reverse Leakage Characteristics

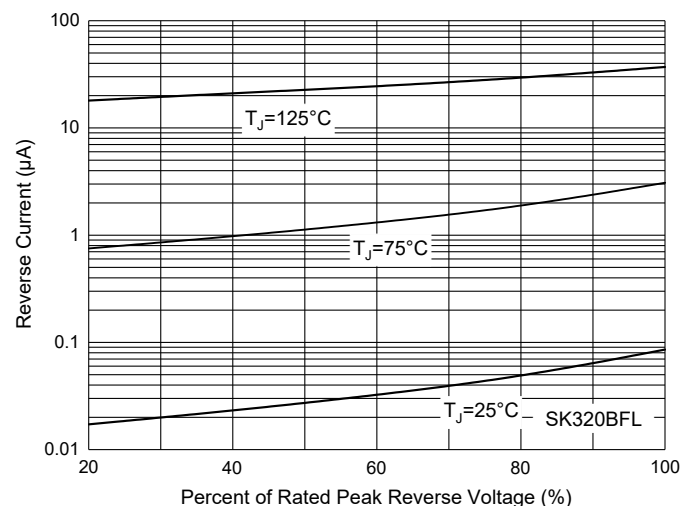
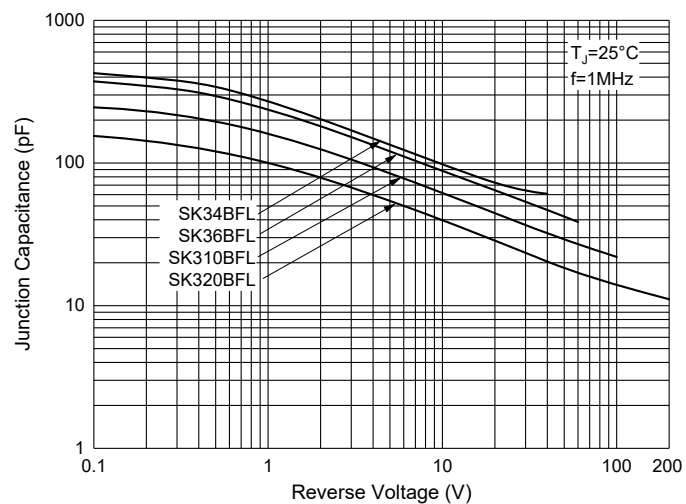


Fig. 11 - Typical Capacitance Characteristics



## Ordering Information

Device	Packing
Part Number-TP	Tape&Reel:5Kpcs/Reel

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