

TM

SK22-LT THRU SK2150-LT

Features

- Schottky Barrier Rectifier
- Guard Ring Protection
- Low Forward Voltage
- Reverse Energy Tested
- High Current Capability
- Extremely Low Thermal Resistance

Maximum Ratings

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- Maximum Thermal Resistance; 15°C/W Junction To Lead

MCC Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
SK22-LT	SK22	20V	14V	20V
SK23-LT	SK23	30V	21V	30V
SK24-LT	SK24	40V	28V	40V
SK25-LT	SK25	50V	35V	50V
SK26-LT	SK26	60V	42V	60V
SK28-LT	SK28	80V	56V	80V
SK210-LT	SK210	100V	70V	100V
SK2150-LT	SK2150	150V	105V	150V

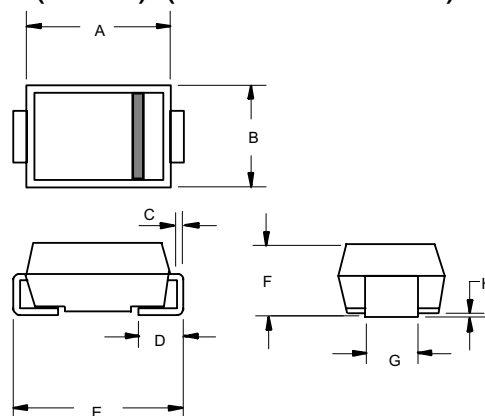
Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	2.0A	$T_J = 90^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	50A	8.3ms, half sine
Maximum Instantaneous Forward Voltage SK22-SK24 SK25-SK26 SK28-SK210 SK2150	V_F	.50V .70V .85V .90V	$I_{FM} = 2.0\text{A};$ $T_J = 25^\circ\text{C}^*$
Maximum DC Reverse Current At Rated DC Blocking Voltage SK22-SK24 SK25-SK210 SK2150	I_R	2.0 mA 1.0 mA 0.5 mA	$T_J = 25^\circ\text{C}$
Typical Junction Capacitance SK22 SK23-SK210 SK2150	C_J	230pF 50pF 170 pF	Measured at 1.0MHz, $V_R=4.0\text{V}$

*Pulse test: Pulse width 300 μsec , Duty cycle 2%

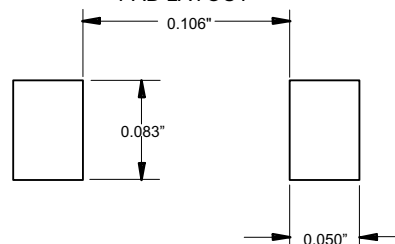
2 Amp Schottky Rectifier 20 to 150 Volts

DO-214AA (SMB) (LEAD FRAME)



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	.160	.185	4.06	4.70	
B	.130	.155	3.30	3.94	
C	.006	.012	0.15	0.31	
D	.030	.060	0.76	1.52	
E	.200	.220	5.08	5.59	
F	.079	.096	2.00	2.44	
G	.075	.087	1.91	2.21	
H	.002	.008	0.05	0.203	

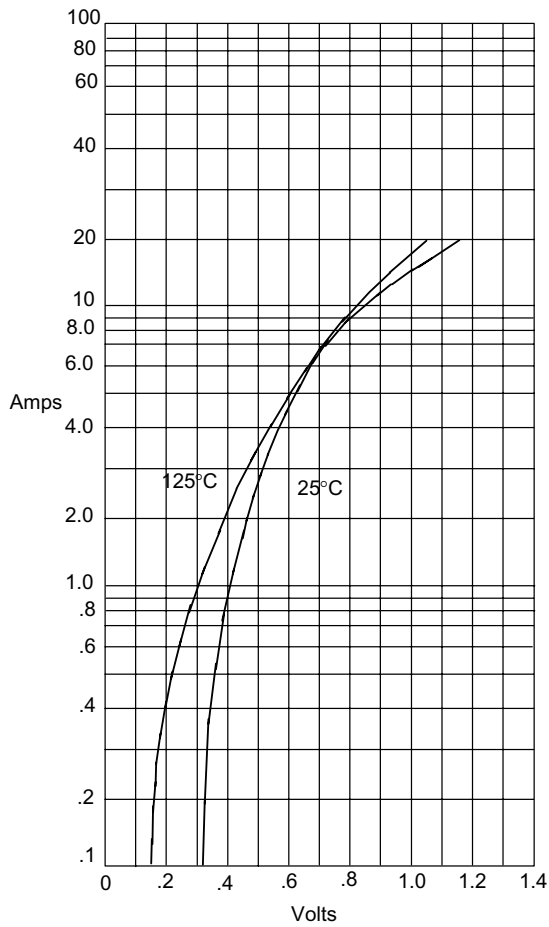
SUGGESTED SOLDER PAD LAYOUT



SK22-LT

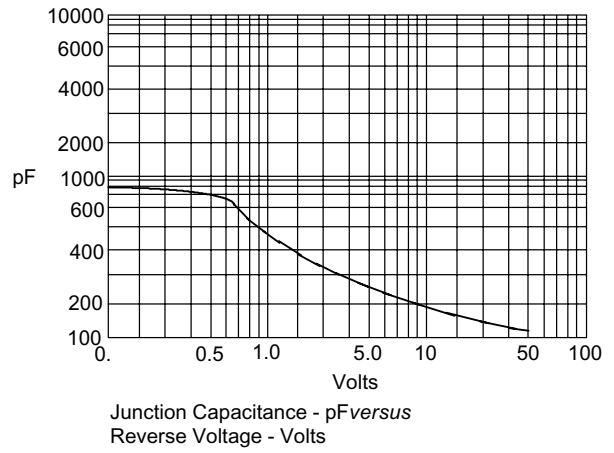
TM

Figure 1
Typical Forward Characteristics



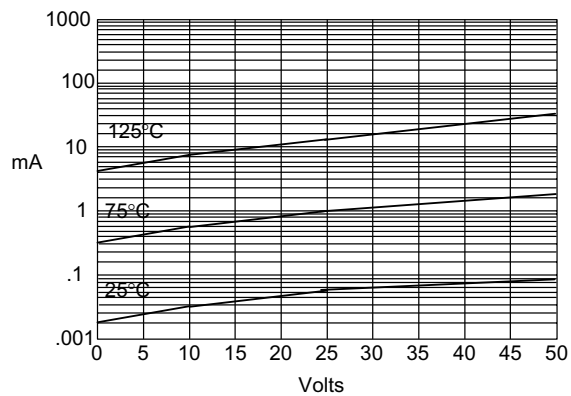
Instantaneous Forward Current - Amperes versus
Instantaneous Forward Voltage - Volts

Figure 3
Typical Junction Capacitance



Junction Capacitance - pF versus
Reverse Voltage - Volts

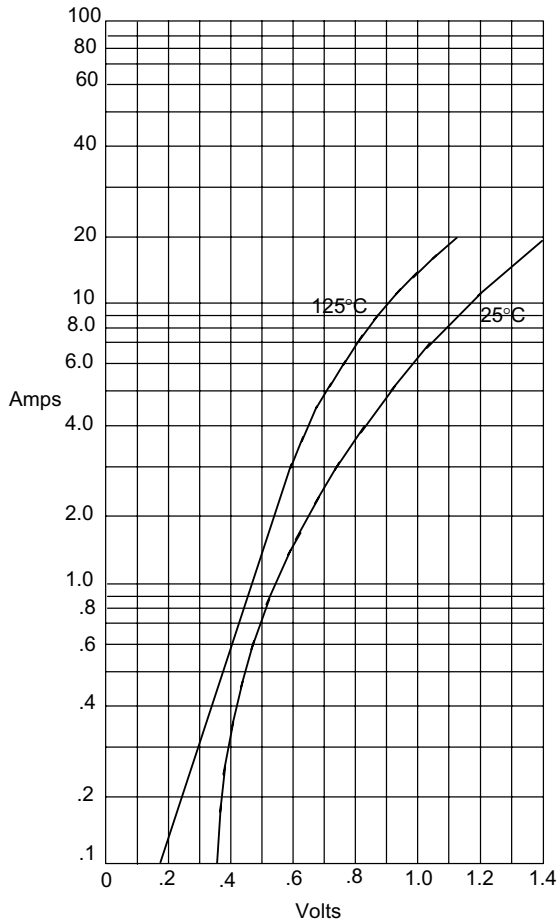
Figure 2
Typical Reverse Characteristics



Typical Reverse Current - mA versus
Reverse Voltage - Volts

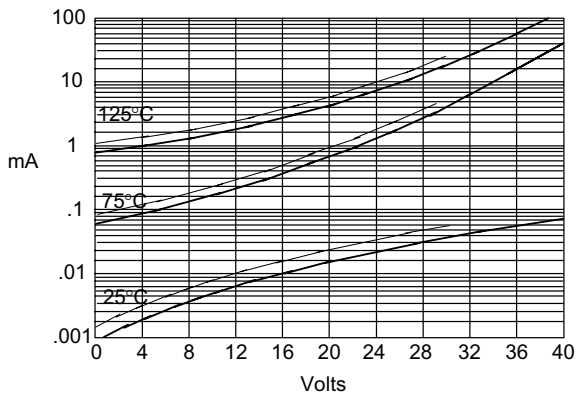
SK23-LT thru SK210-LT

Figure 1
Typical Forward Characteristics



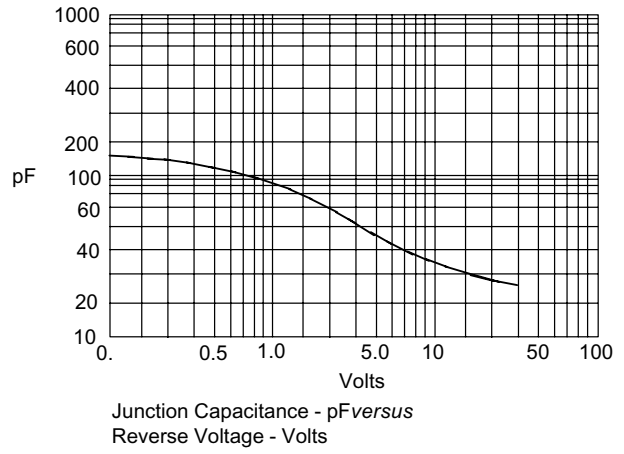
Instantaneous Forward Current - Amperes *versus*
Instantaneous Forward Voltage - Volts

Figure 2
Typical Reverse Characteristics



Typical Reverse Current - mA *versus*
Reverse Voltage - Volts

Figure 3
Typical Junction Capacitance



Junction Capacitance - pF *versus*
Reverse Voltage - Volts

SK22---
SK25---

SK2150-LT

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

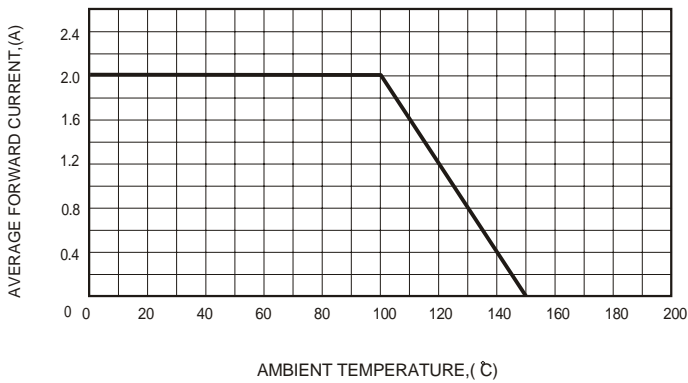


FIG.2-TYPICAL FORWARD CHARACTERISTICS

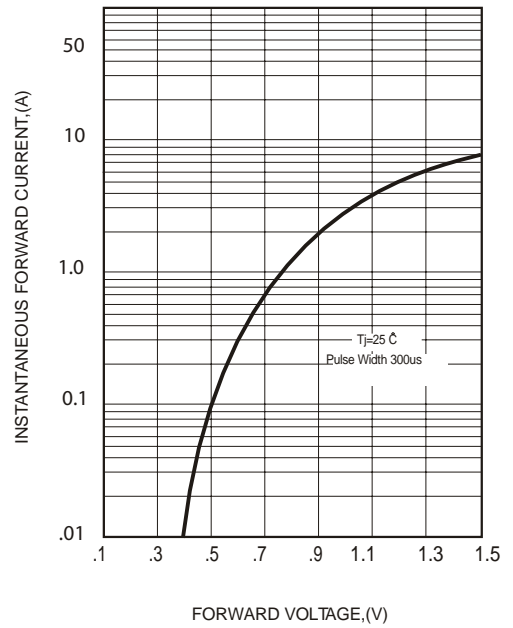


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

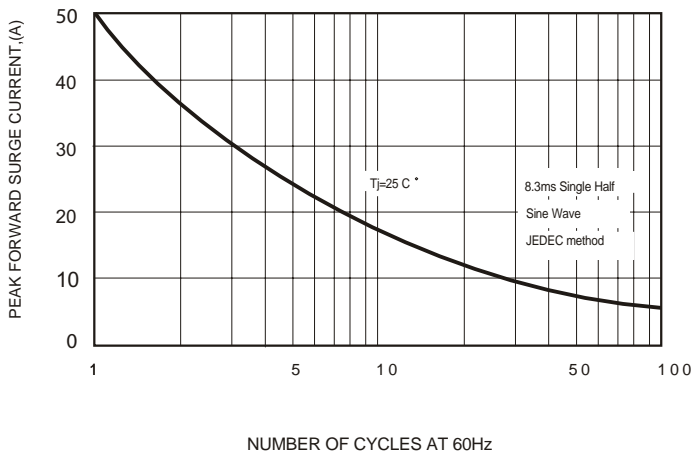


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

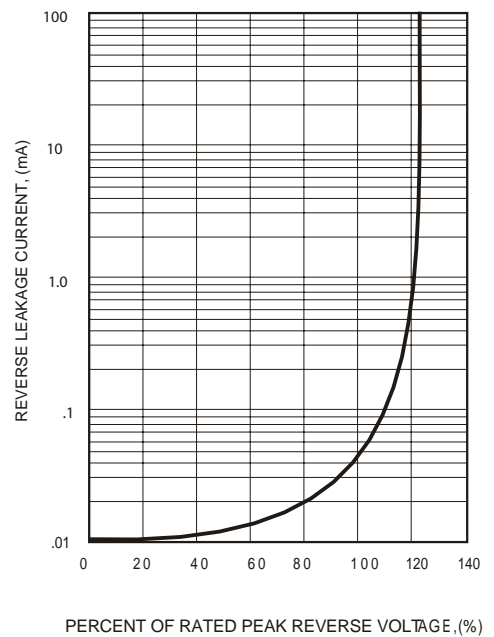


FIG.4-TYPICAL JUNCTION CAPACITANCE

