

Features

- Lead Free Finish/Rohs Compliant (Note1) ("P" Suffix designates Compliant. See ordering information)
- Low Forward Voltage
- Guard Ring Protection
- High Current Capability
- Low Thermal Resistance
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL rating 1

Maximum Ratings

- Operating Temperature(Tj): -55°C to +125°C
- Storage Temperature(Tstg): -55°C to +150°C
- Maximum Thermal Resistance; 28°C/W Junction To Lead

MCC Catalog Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
SK12	20V	14V	20V
SK13	30V	21V	30V
SK14	40V	28V	40V
SK15	50V	35V	50V
SK16	60V	42V	60V
SK18	80V	56V	80V
SK110	100V	70V	100V

Electrical Characteristics @ 25°C Unless Otherwise Specified

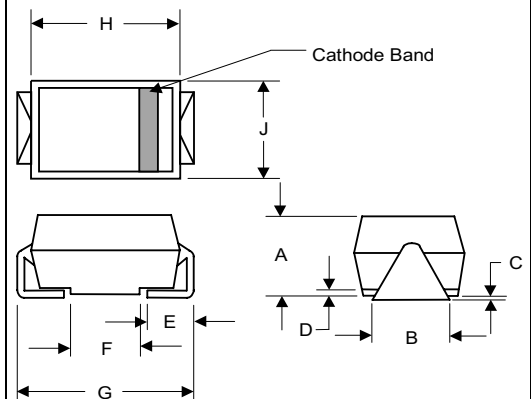
Average Forward Current	$I_{F(AV)}$	1.0A	$T_J = 90^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	30A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	V_F	SK12 .45V SK13 .55V SK14 .60V SK15-16 .72V SK18-110 .85V	$I_{FM} = 1.0A;$ $T_a = 25^\circ\text{C}^*$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	0.5mA 20mA	$T_A = 25^\circ\text{C}$ $T_A = 100^\circ\text{C}$
Typical Junction Capacitance	C_J	SK12 110pF SK13-SK110 30pF	Measured at 1.0MHz, $V_R=4.0V$

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

Note: 1. High Temperature Solder Exemptions Applied, see EU Directive Annex 7.

1 Amp Schottky Rectifier 20 to 100 Volts

DO-214AA (HSMB) (Round Lead)



DIM	DIMENSIONS				NOTE
	INCHES		MM		
A	.078	.116	1.98	2.95	
B	.075	.089	1.90	2.25	
C	.002	.008	.05	.20	
D	---	.02	---	.51	
E	.035	.055	.90	1.40	
F	.065	.091	1.65	2.32	
G	.205	.224	5.21	5.69	
H	.160	.180	4.06	4.57	
J	.130	.155	3.30	3.94	

SUGGESTED SOLDER PAD LAYOUT

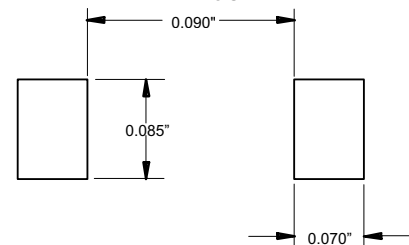
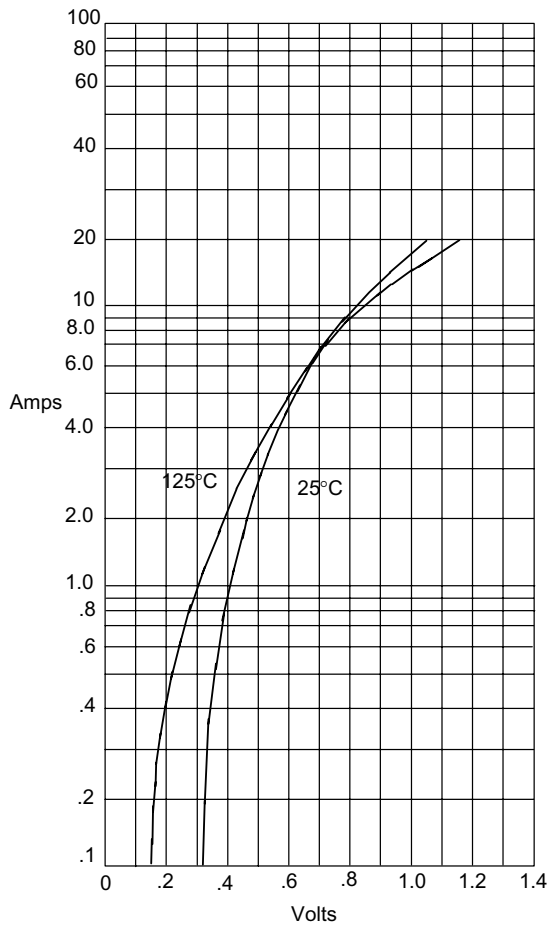
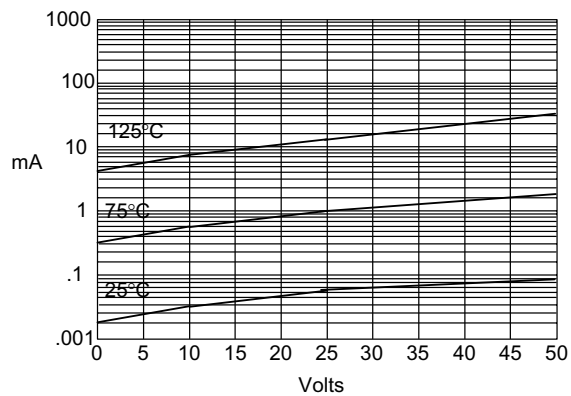


Figure 1
Typical Forward Characteristics



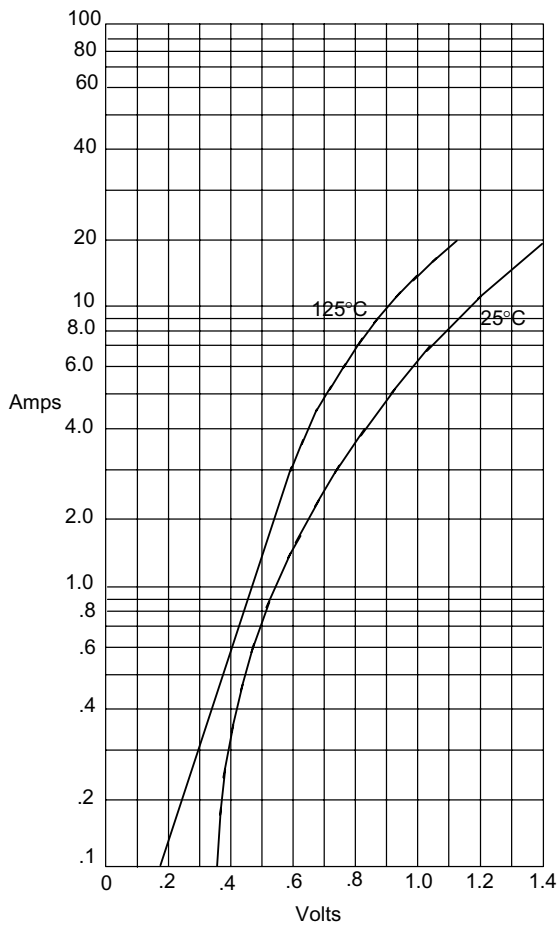
Instantaneous Forward Current - Amperes *versus*
Instantaneous Forward Voltage - Volts

Figure 2
Typical Reverse Characteristics



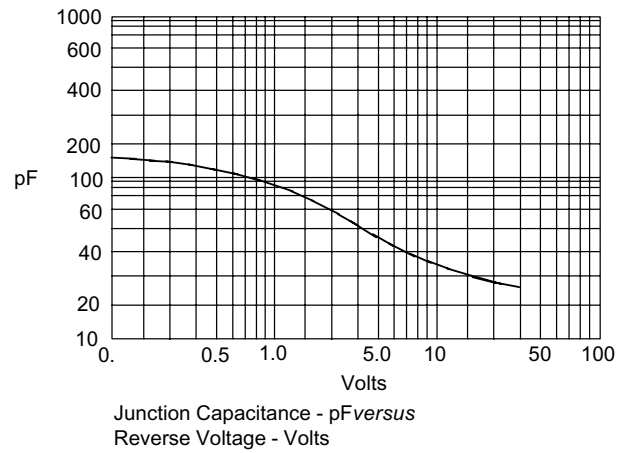
Typical Reverse Current - mA *versus*
Reverse Voltage - Volts

Figure 1
Typical Forward Characteristics



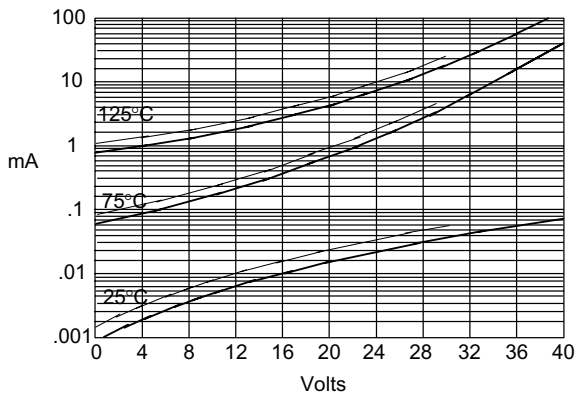
Instantaneous Forward Current - Amperes versus
Instantaneous Forward Voltage - Volts

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

SK13	—
SK14	—