



**TAYCHIPST**

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

SK12 THRU SK110

20V-100V 1.0A

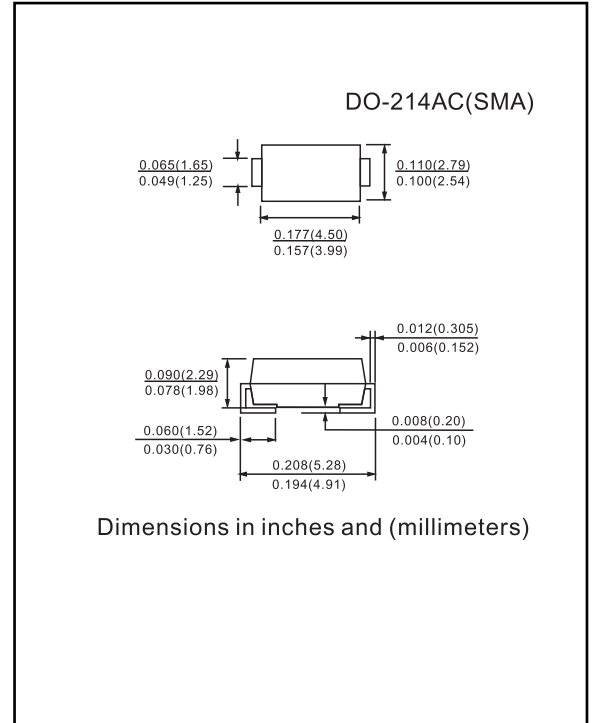
**Features**

- 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 +125°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
SK12	SK12	20V	14V	20V
SK13	SK13	30V	21V	30V
SK14	SK14	40V	28V	40V
SK15	SK15	50V	35V	50V
SK16	SK16	60V	42V	60V
SK18	SK18	80V	56V	80V
SK110	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	$I_{FM} = 1.0A$ ; $T_J = 25^\circ\text{C}^*$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	.5mA	$T_J = 25^\circ\text{C}$
Typical Junction Capacitance	$C_J$	SK12 230pF SK13-SK110 50pF	Measured at 1.0MHz, $V_R=4.0V$

\*Pulse test: Pulse width 300  $\mu\text{sec}$ , Duty cycle 2%



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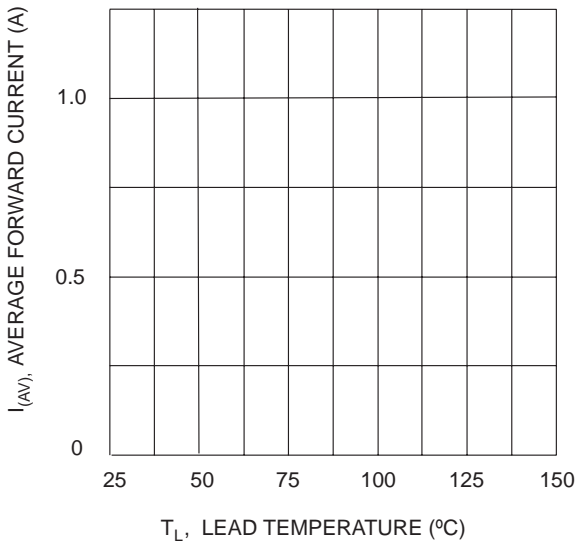


Fig. 1 Forward Current Derating Curve

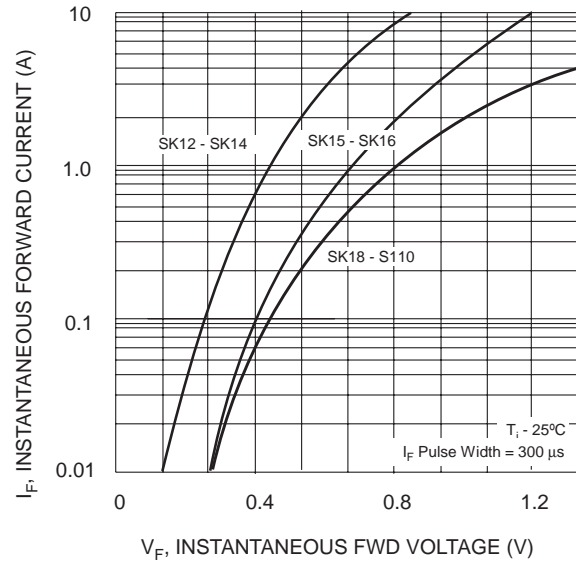


Fig. 2 Typ. Forward Characteristics

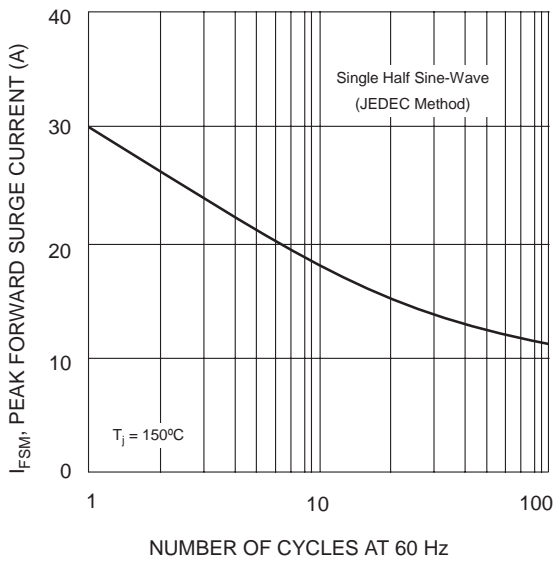


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

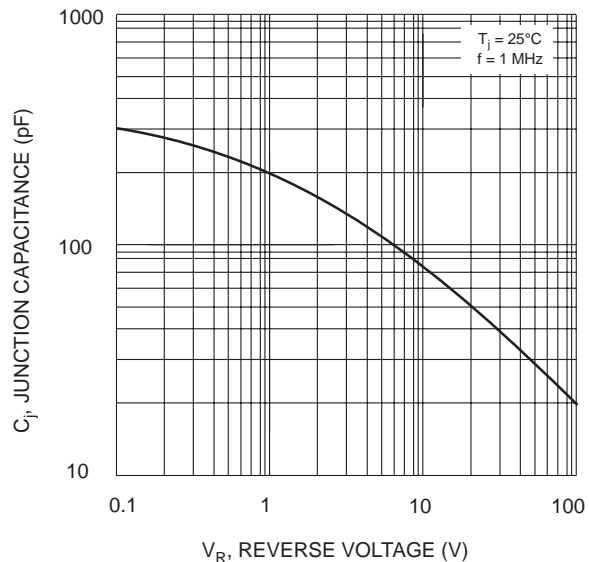


Fig. 4 Typical Junction Capacitance

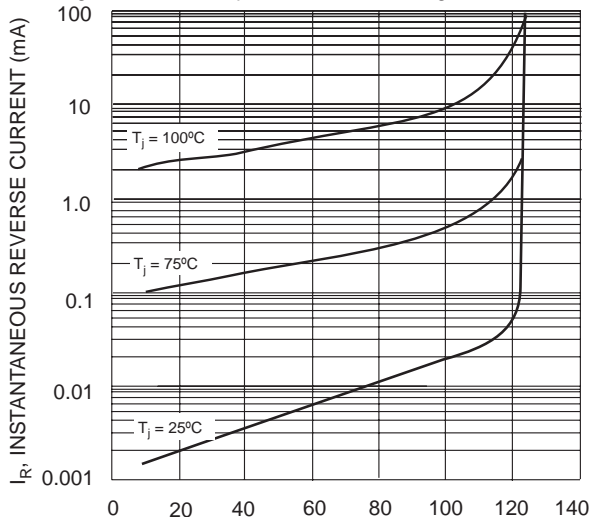


Fig. 5 Typical Reverse Characteristics