SK27 THRU SK2B

VOLTAGE 70V ~ 100V

2.0AMP Surface Mount Low V_F Schottky Barrier Rectifiers

FEATURES

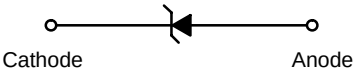
* For surface mount applications
* Epitaxial construction
* Very low forward voltage drop
* For use in low voltage, high frequency inverter, free wheeling

DO- 214AA

SMB

MECHANICAL DATA

* Case: Molded plastic
* Epoxy: UL 94V- 0 rate flame retardant
* Polarity: Color band denotes cathode end
* Weight: 0.093 grams



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25°C ambient temperature unless otherwise specified.
Single phase half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%

Parameter	Symbols	SK27	SK28	SK29	SK2B	Units
Maximum repetitive peak reverse voltage	V_{RRM}	70	80	90	100	Volts
Maximum RMS voltage	V_{RMS}	49	56	63	70	Volts
Maximum DC blocking voltage	V_{DC}	70	80	90	100	Volts
Maximum average forward rectified current @T_L=100°C	$I_{(AV)}$	2.0				Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	50.0				Amps
Maximum forward voltage at 2.0A DC @T_J= 25°C @T_J= 100°C	V_F	0.79 0.69				Volts
Maximum DC reverse current at rated DC blocking voltage @T_J= 25°C @T_J=100°C	I_R	0.5 15				mA
Typical junction capacitance (Note 1)	C_J	75				pF
Typical thermal resistance (Note 2)	$R_{\theta JL}$	15				°C/W
Operating junction temperature range	T_J	-55 to +125				°C
Storage remperature range	T_{STG}	-55 to +150				°C

Notes: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
2. Thermal Resistance Junction to Lead.

RATINGS AND CHARACTERISTIC CURVES

FIG.1 - FORWARD CURRENT DERATING CURVE

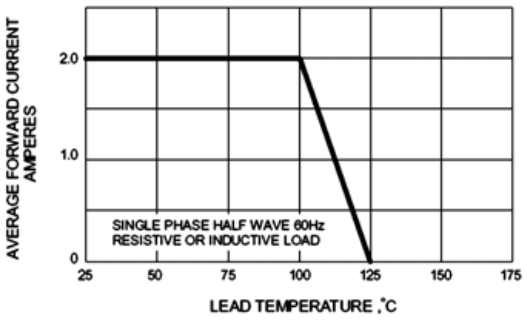


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

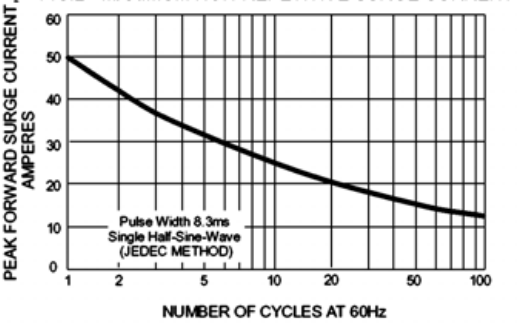


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

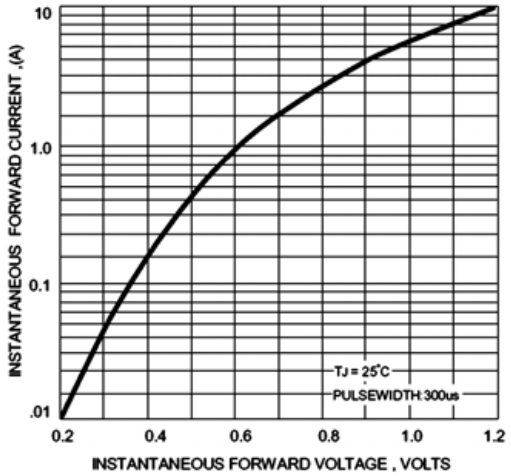


FIG.4 - TYPICAL JUNCTION CAPACITANCE

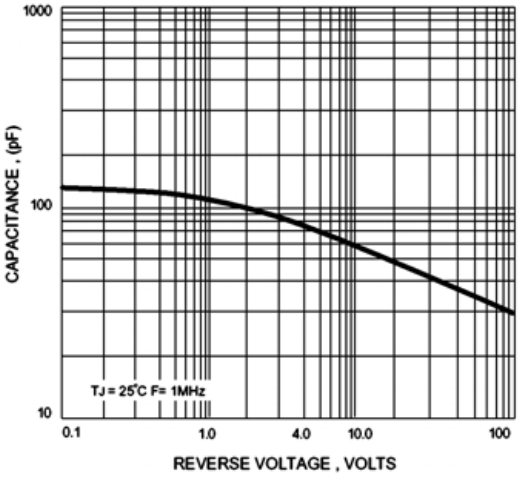
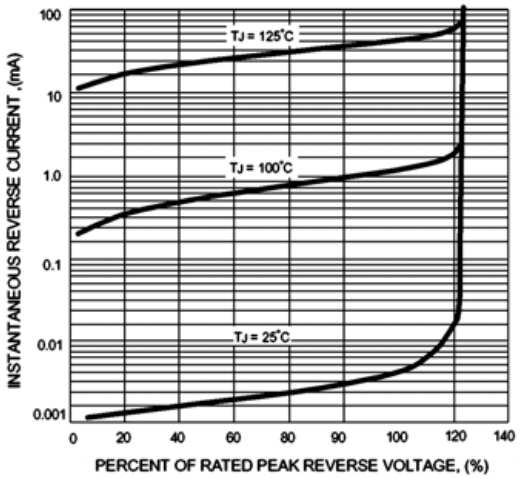
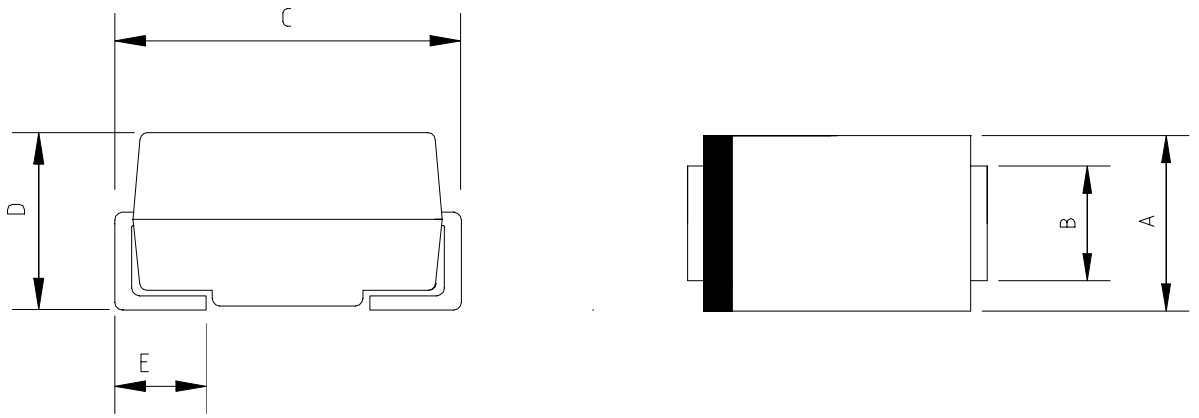


FIG.5 - TYPICAL REVERSE CHARACTERISTICS



Package Dimensions in inches and (millmeters)

Package outline



Dimensions				
	inches		mm	
	Min.	Max.	Min.	Max.
A	0.137	0.147	3.48	3.73
B	0.760	0.820	1.93	2.08
C	0.207	0.215	5.28	5.46
D	0.78	1.030	1.99	2.61
E	0.35	0.56	0.90	1.41

Note:
DO-214AA
molded plastic case
The marking band indicates the cathode