DACO SEMICONDUCTOR CO., LTD.

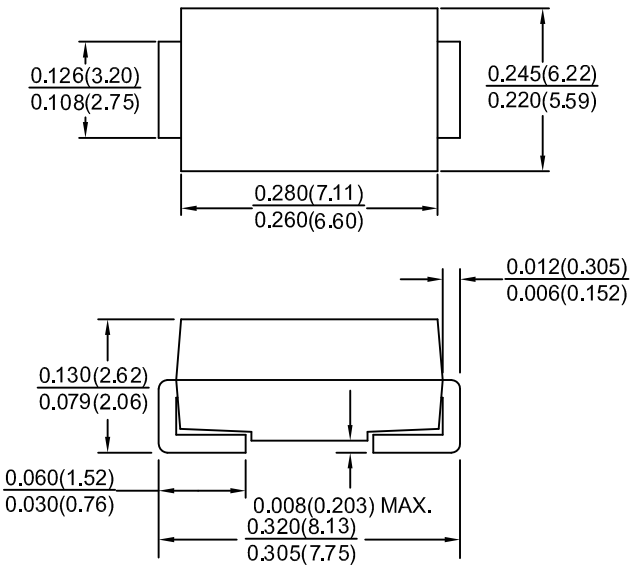
SK32 THRU SK3A0

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

SMC/DO-214AB

FEATURES:

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- For surface mounted applications
- Low profile package
- Built-in strain relief
- Metal silicon junction, majority carrier conduction
- Low power loss,high efficiency
- High surge capability
- High current capability, low forward voltage drop
- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
- High temperature soldering guaranteed: 250℃/10 seconds at terminals



Dimensions in inches and (millimeters)

MECHANICAL DATA

Case: molded plastic body
Terminals: Solder plated, solderable perMIL-STD-705, Method 2026
Polarity: Color band on body denotes cathode end
Weight:0.003 ounce,0.093 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temp. unless otherwise specified.
Single phase, half sine wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20 %.

Characteristic	Symbol	SK32	SK33	SK34	SK35	SK36	SK38	SK3A0	Units
	Marking or Marking	SK32	SK33	SK34	SK35	SK36	SK38	SK3A0	
		SS32	SS33	SS34	SS35	SS36	SS38	SS3A0	
Maximum recurrent peak reverse voltage	V_{RRM}	20	30	40	50	60	80	100	Volts
Maximum RMS voltage	V_{RMS}	14	21	28	35	42	56	70	Volts
Maximum DC voltage	VDC	20	30	40	50	60	80	100	Volts
Maximum average forward rectified current at T_L (see fig.1)	I_O	3.0							Amps
Peak forward surge current,8.3ms single half sine-wave auperimposed on rated load(JEDEC Methed)	I_{FSM}	80							Amps
Maximum instantaneous forward voltage drop per leg bridge element at 3.0 ADC (NOTE 3)	V_F	0.55			0.70		0.85		Volts
Maximum DC reverse current (NOTE 3)Ta=25℃	I_R	0.5							m A
Maximum DC blocking voltage Ta=100℃		20							
Typical junction capacitance (note 1)	C_J	500			200				PF
Typical thermal resistance (note 2)	R_{θ}-JA	55.0							℃/W
Operating temperature range	TJ	-65 to+125							℃
Storage temperature range	Tstg	-65 to+150							℃

NOTE :1.Measured at 1 MHZ and applied reverse voltage of 4.0 volTS
2.P.C.B mounted with 0.2x0.2(5.0mmx5.0mm) copper pad areas
3.Pulse test : 300 us pulse width, 1% duty cycle

RATINGS AND CHRACTERISTIC CURVES

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIER CURRENT

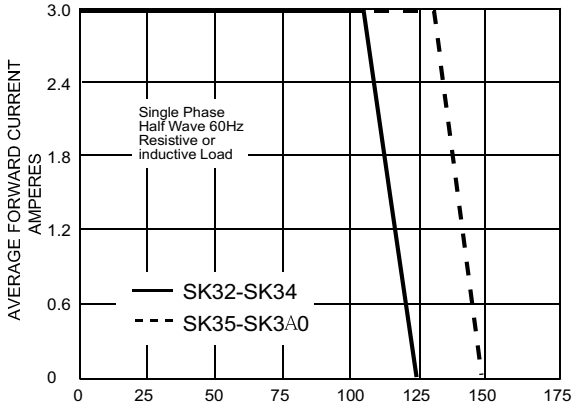


FIG.2-MAXIMUN NON-REPETITIVE PEAK FORWARD SURGE CURRENT

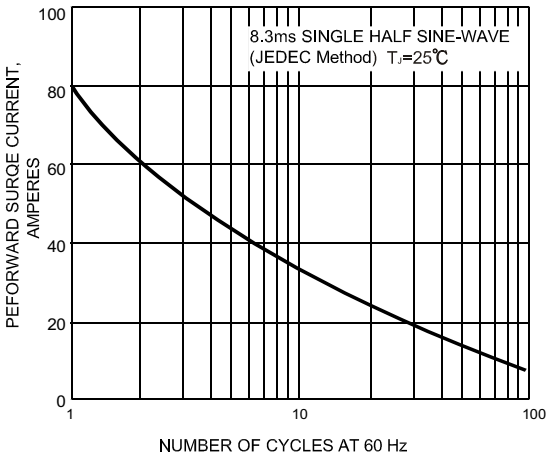


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

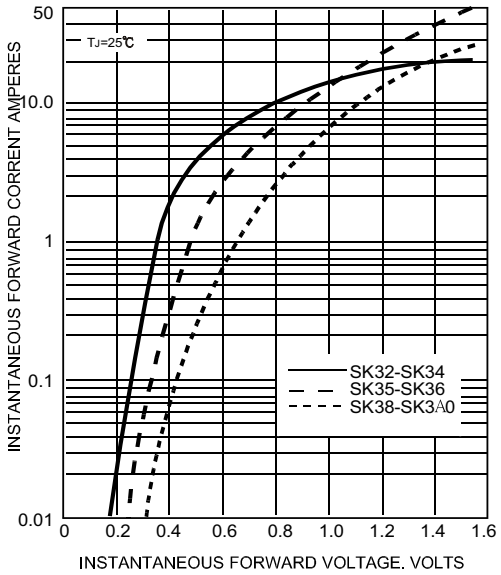


FIG.4-TYPICAL REVERSE CHARACTERISTICS

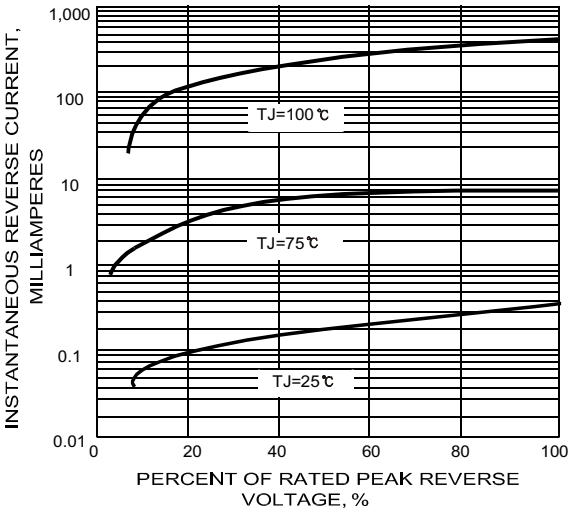


FIG.5-TY ᵎICAL JUNCTION CAPACITANCE

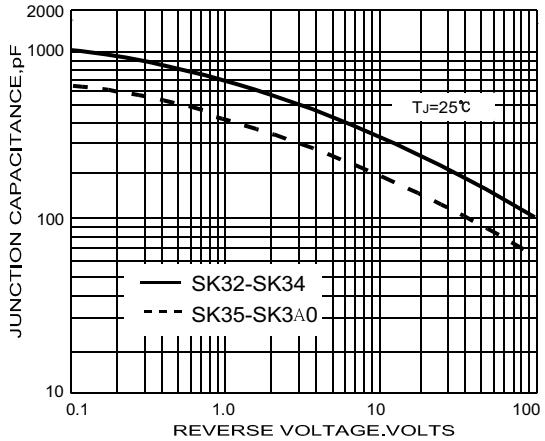
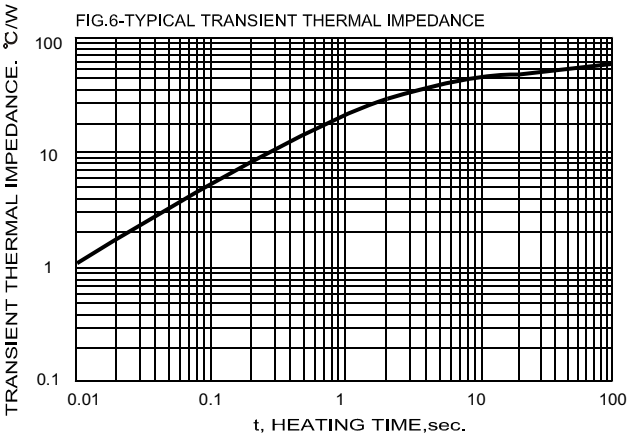


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE



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