SC50A THRU SC50M
50A, 50V TO 1200V
SOZA CELL

DSK Diode Semiconductor Korea

FEATURES

High current capability

Low forward voltage drop

Low leakage current

High surge current capability

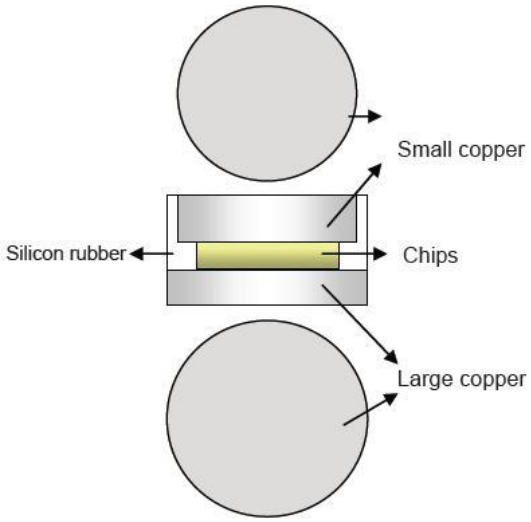
MECHANICAL DATA

Small copper：ψ0.258(6.55) x 0.0394(1.0)Thick

Large copper：ψ0.284(7.22) x 0.0295(0.75)Thick

Outline information：ψ0.284(7.22) x 0.0866(2.2)Thick

SC



Dimension in inches(millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ Ambient temp. Unless otherwise specified.Single phase, half sine wave, 60HZ,resistive or inductive load.

For capacitive load, derate current by 20%

	SYMBOL	SC							UNITS
		50A	50B	50D	50G	50J	50K	50M	
Maximum Current Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	Volts
T_L=100℃ Maximum Average Forward Rectified Current	I(AV)	50							Amps
Peak Forward Surge Current 8.3ms Single Sine-wave on Rated Load (JEDEC Method)	IFSM	500							Amps
Maximum Instantaneous Forward Voltage Drop at 50A DC	VF	1.0							Volts
Maximum DC Reverse Current T_A=25℃ at Rated DC Blocking Voltage T_A=125℃	IR	5 250							uA
Typical Junction Capacitance (NOTE 1)	CJ	300							pF
Operating AND Storage Temperature Range	TSTG/ TJ	-55 to +150							℃

NOTE: 1.Measured at 1 MHz and Applied Reverse Voltage of 4.0 Volts D.C.

RATING ANDCHARACTERISTIC CURVES SC50A THRU SC50M

FIG. 1 –MAXIMUM AVERAGE FORWARD CURRENT DERATING

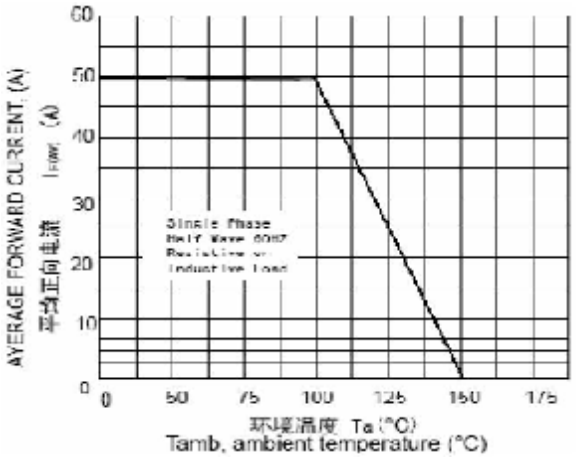


FIG. 2 –MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

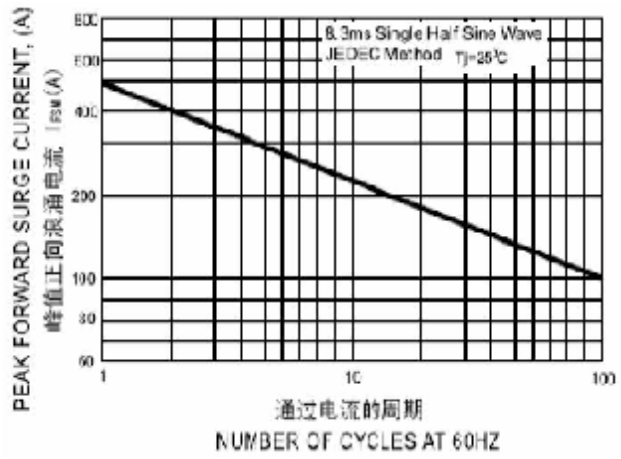


FIG. 3 – TYPICA REVERSE CHARACTERISTICS

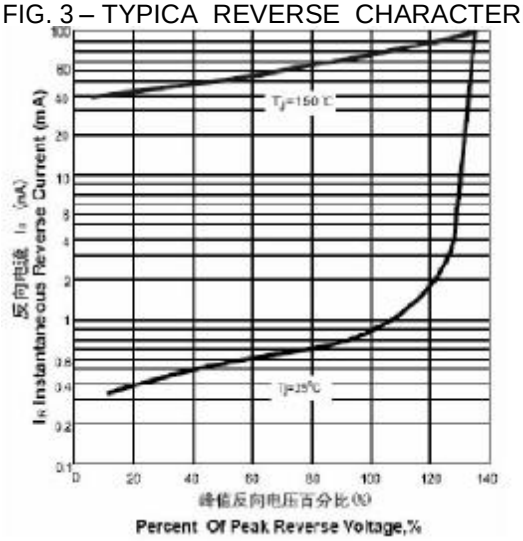


FIG.4 – TYPICA FORWARD CHARACTERISTICS

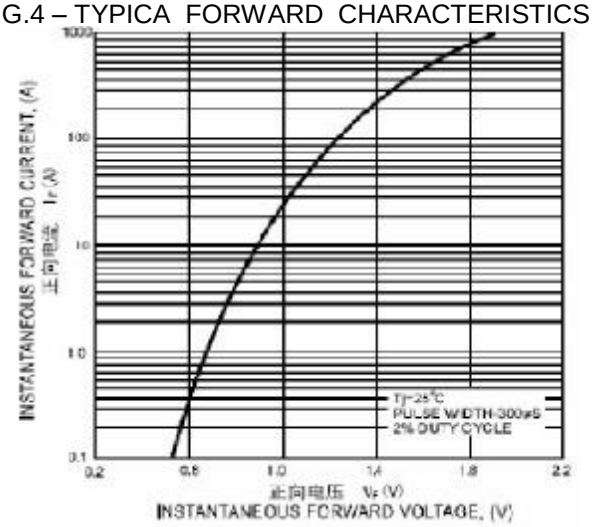


FIG.5–TYPICAL JUNCTION CAPACITANCE