JS-SS54

SMB SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

Features

- Ideal for surface mount applications
- Easy pick and place
- Built-in strain relief
- Low forward voltage drop

SMB


Equivalent Circuit

MECHANICAL DATA

- Case: Molded plastic
- Epoxy: UL 94V-0 rate flame retardant
- Metallurgically bonded construction
- Mounting position: Any
- Weight: 0.093 gram

Maximum Ratings and Electrical Characteristics

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

Parameter	Symbols	SS54	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	40	V
Maximum RMS voltage	V_{RMS}	28	V
Maximum DC Blocking Voltage	V_{DC}	40	V
Maximum Average Forward Rectified Current At T_L=90°C	$I_{F(AV)}$	5.0	A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	120	A
Max Instantaneous Forward Voltage at 5.0A	V_F	0.55	V
Maximum DC Reverse Current Ta = 25°C at Rated DC Reverse Voltage Ta =100°C	I_R	0.1 5	mA
Typical Junction Capacitance (1)	C_j	380	pF
Typical Thermal Resistance (2)	$R_{\theta JA}$	16	°C/W
Operating Junction Temperature Range	T_j	-65~+150	°C
Storage Temperature Range	T_{stg}	-65~+150	°C

（1）Measured at 1MHz and applied reverse voltage of 4.0V D.C.
（2）Thermal Resistance Junction to Lead.

Ordering information

Product ID	Pack	Naming rule	Marking	Qty(PCS)
SS54	SMB	SS54 产品名称 product name	SS54	3000

Typical Characteristics

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

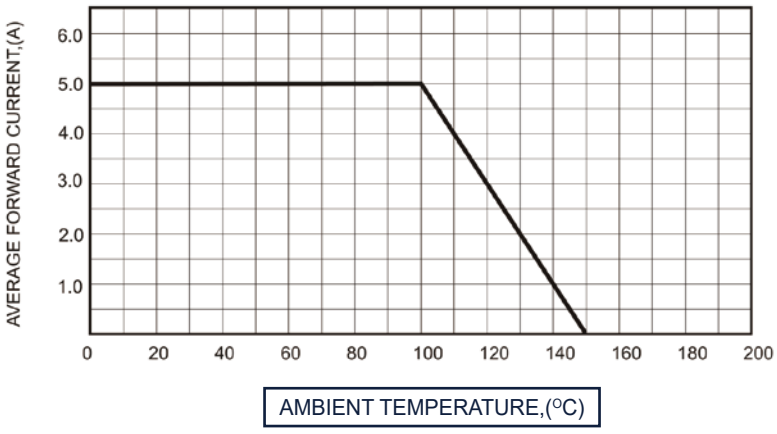


FIG.2-TYPICAL FORWARD CHARACTERISTICS

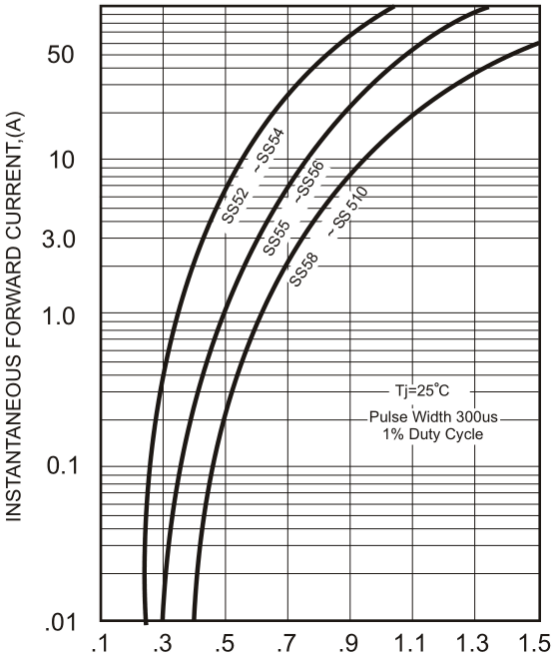


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

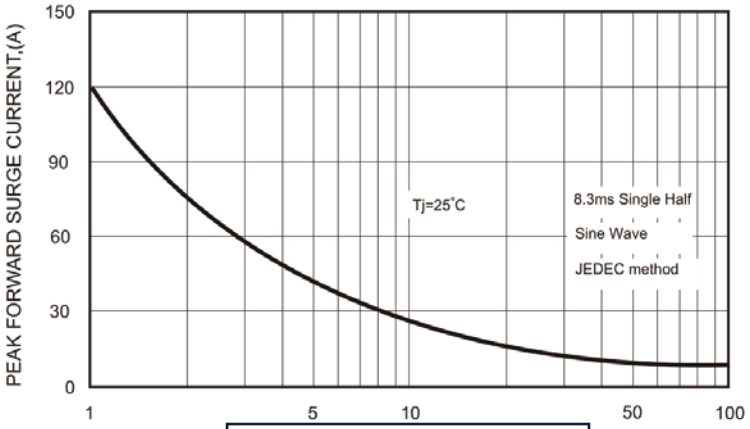
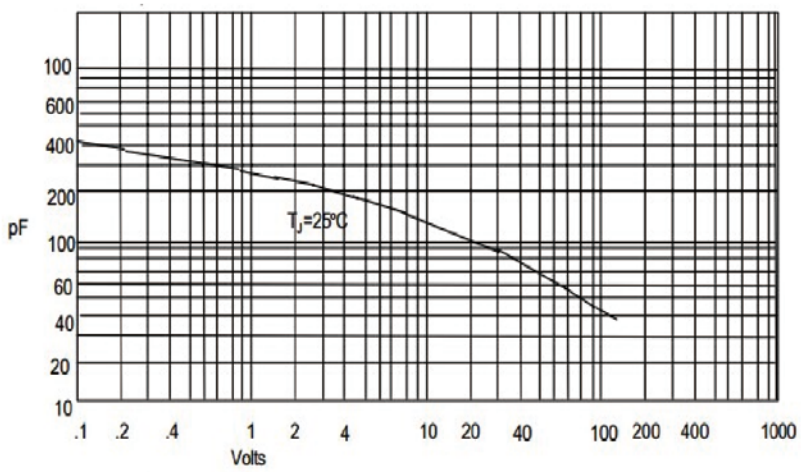
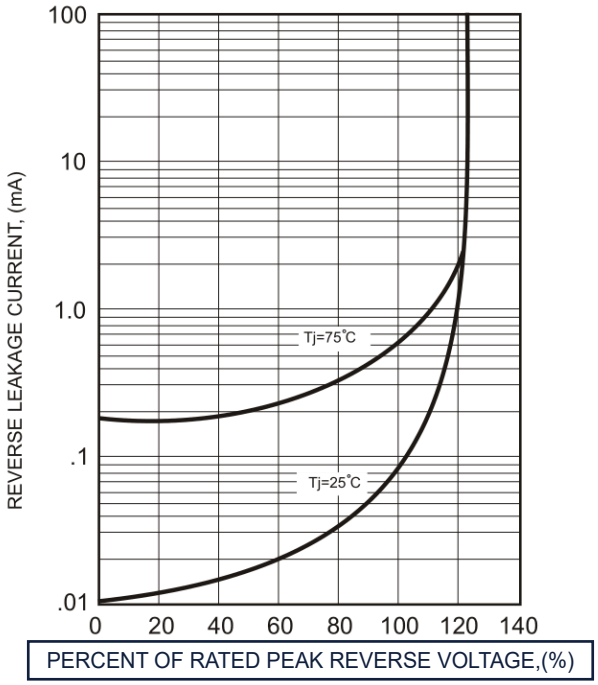


FIG.4-TYPICAL JUNCTION CAPACITANCE



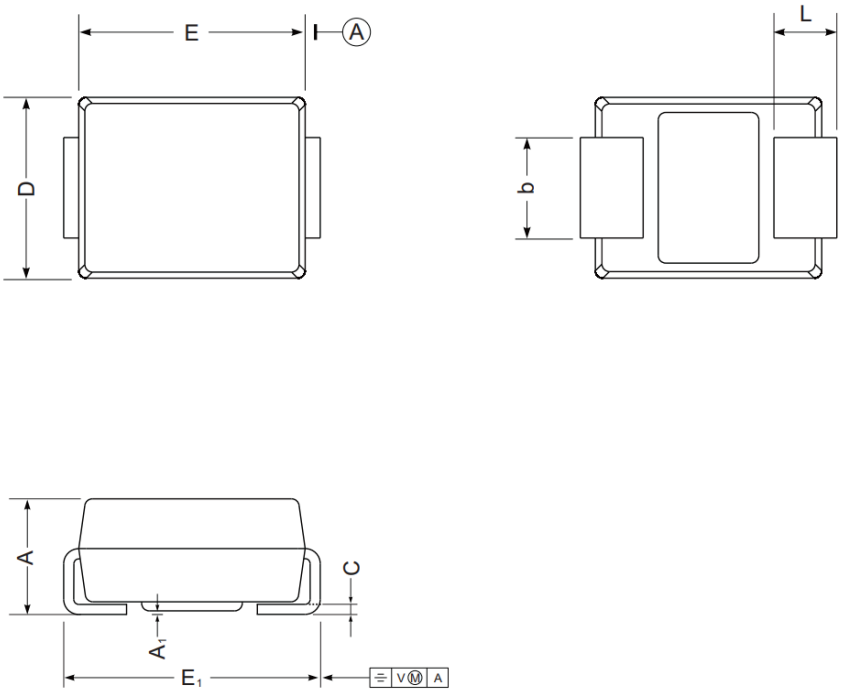
Junction Capacitance - pF *versus* Reverse Voltage - Volts

FIG.5 - TYPICAL REVERSE CHARACTERISTICS



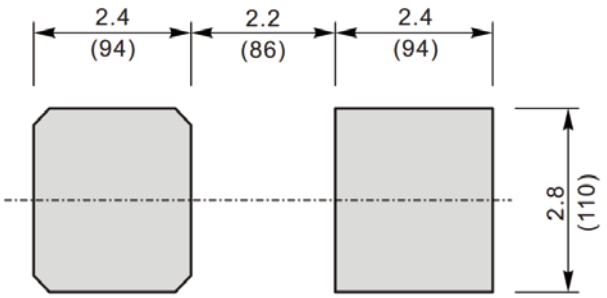
PACKAGE OUTLINE

Plastic surface mounted package; 2 leads SMB



UNIT		A	E	D	E_1	A_1	L	C	B
mm	max	2.44	4.70	3.94	5.59	0.20	1.5	0.305	2.2
	min	2.13	4.06	3.3	5.08	0.05	0.8	0.152	1.9
mil	max	96	185	155	220	7.9	59	12	87
	min	84	160	130	200	2.0	32	6	75

The recommended mounting pad size



Unit: mm / (mil)