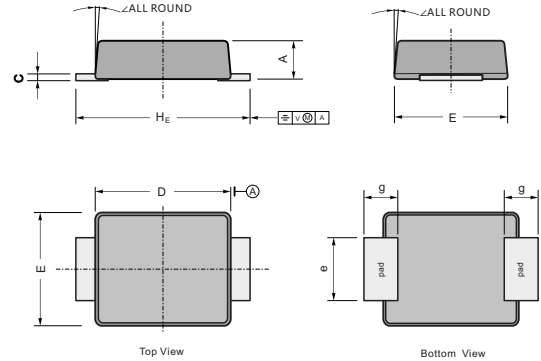


REVERSE VOLTAGE: 20 --- 100 V
CURRENT: 5.0 A

Features

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



Mechanical Data

- ✧ Case: JEDEC SMBF, molded plastic over passivated chip
- ✧ Polarity: Color band denotes cathode end

UNIT		A	C	D	E	H _e	e	g	∠
mm	max	1.3	0.26	4.4	3.7	5.5	2.2	1.0	9°
	min	1.1	0.18	4.2	3.5	5.1	1.9		
mil	max	51	10	173	146	216	86	40	
	min	43	7	165	138	200	75		

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

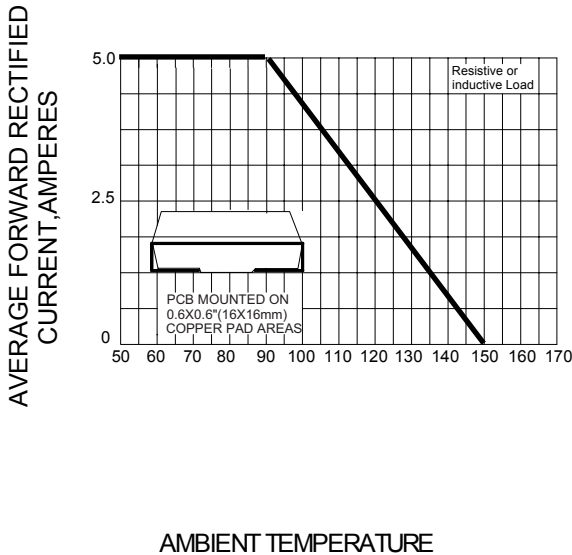
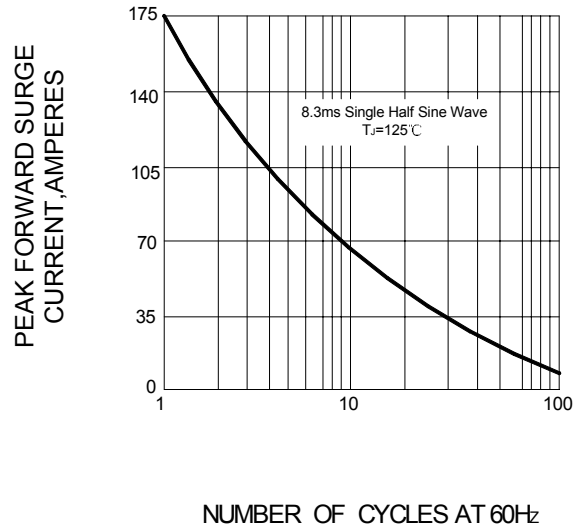
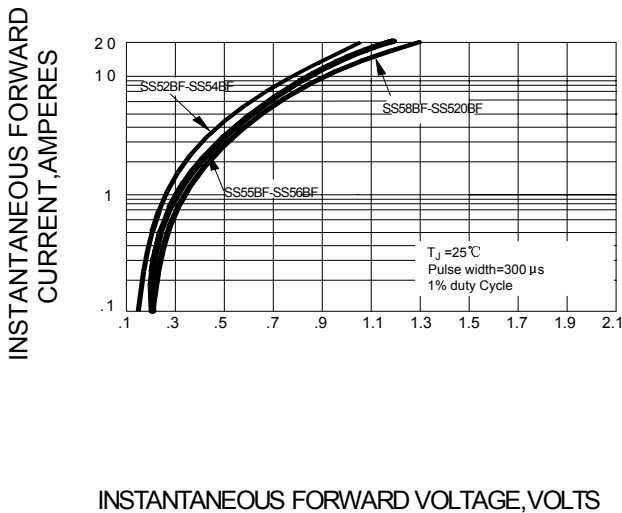
Ratings at 25°C ambient temperature unless otherwise specified

		SS 52	SS 53	SS 54	SS 55	SS 56	SS 58	SS 59	SS 510	SS 515	SS 520	UNITS
Maximum recurrent peak reverse voltage	V _{RRM}	20	30	40	50	60	80	90	100	150	200	V
Maximum RMS voltage	V _{RWS}	14	21	28	35	42	56	63	70	86	105	V
Maximum DC blocking voltage	V _{DC}	20	30	40	50	60	80	90	100	150	200	V
Maximum average forward rectified current at T _L (SEE FIG.1) (NOTE 2)	I _(AV)	5.0										A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	175										A
Maximum instantaneous forward voltage at 5.0A (NOTE 1)	V _F	0.45	0.55		0.70		0.85					V
Maximum DC reverse current @T _A =25°C at rated DC blocking voltage (NOTE 1) @T _A =100°C	I _R	0.5										mA
		20					10					
Typical thermal resistance (NOTE 2)	R _{JA}	55										°C/W
	R _{JL}	17										
Operating junction temperature range	T _J	-55 --- +150										°C
Storage temperature range	T _{STG}	-55 --- +150										°C

NOTE: 1. Pulse test: 300 μS pulse width, 1% duty cycle

2. P.C.B. mounted with 0.55"X0.55" (14.0X14.0mm²) copper pad areas

Ratings AND Characteristic Curves

FIG.1 – FORWARD DERATING CURVE

FIG.2– PEAK FORWARD SURGE CURRENT

FIG.3 – TYPICAL FORWARD CHARACTERISTICS

FIG.4 – TYPICAL REVERSE CHARACTERISTICS
