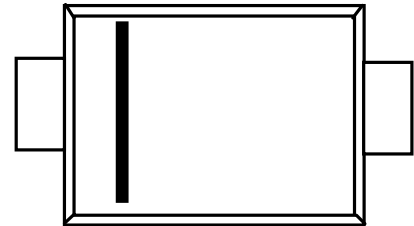


»Features

- For surface mounted applications
- Metal silicon junction,majority carrier conduction
- Low power loss,high efficiency
- Built-in strain relief,ideal for automated placement
- High forward surge current capability
- High temperature soldering guaranteed:
250℃/10 seconds at terminals



SMC(DO-214AB)

»General Description

- Case: JEDEC DO -214AB molded plastic
- Terminals: Axial leads. Solderable per MIL - STD - 750 Method 2026
- Polarity: Color band denotes cathode
- Mounting Position: Any

» Maximum Ratings and Electrical Characteristics

Ratings at 25℃ ambient temperature unless otherwise specified.

Single phase half wave 60HZ. resistive or inductive load. For capacitive load current derate by 20%

	SYMBOLS	SS52	SS54	SS56	SS58	SS510	SS515	SS520	UNITS
Maximum repetitive peak reverse voltage	V _{RRM}	20	40	60	80	100	150	200	VOLTS
Maximum RMS voltage	V _{RMS}	14	21	28	56	70	105	150	VOLTS
Maximum DC blocking voltage	V _{DC}	20	40	60	80	100	150	200	VOLTS
Maximum average forward rectified current at T _L =110°C	I _(AV)	5.0							Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	150.0							Amps
Maximum instantaneous forward voltage at 5.0A	V _F	0.55		0.70	0.85		0.95		Volts
Maximum DC reverse current T _A =25°C at rated DC blocking voltage T _A =100°C	I _R	0.5					0.2		mA
		20.0			10.0		2.0		
Typical thermal resistance (NOTE 1)	R _{θJA}	50							C/W
Operating junction and storage temperature range	T _J ,T _{STG}	-65 to +150							°C

»Typical Performance Characteristics (($T_J = 25^\circ\text{C}$, unless otherwise noted))

FIG. 1- FORWARD CURRENT DERATING CURVE

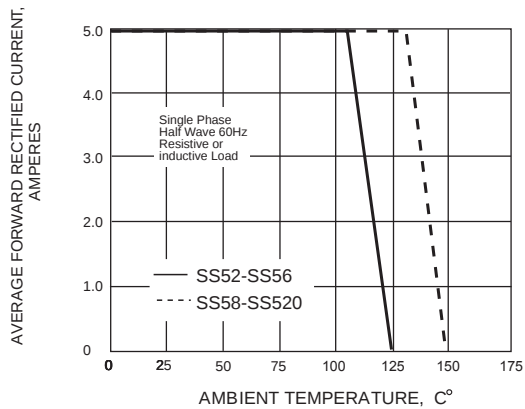


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

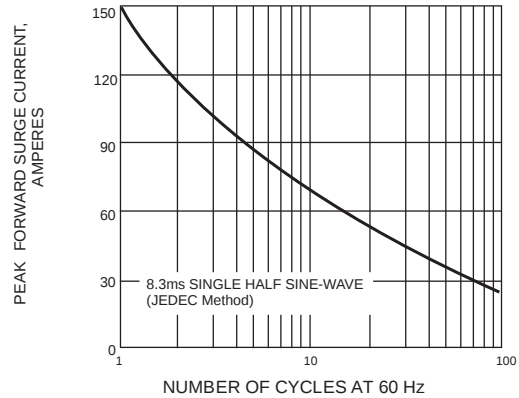


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

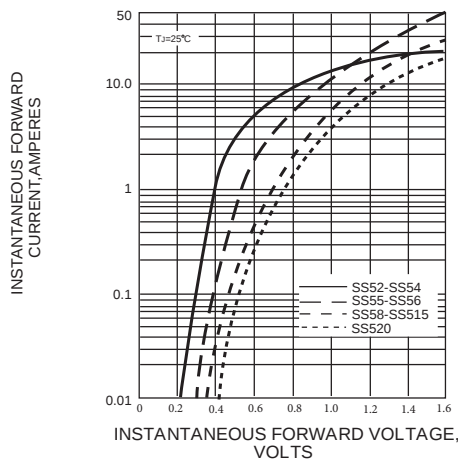


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

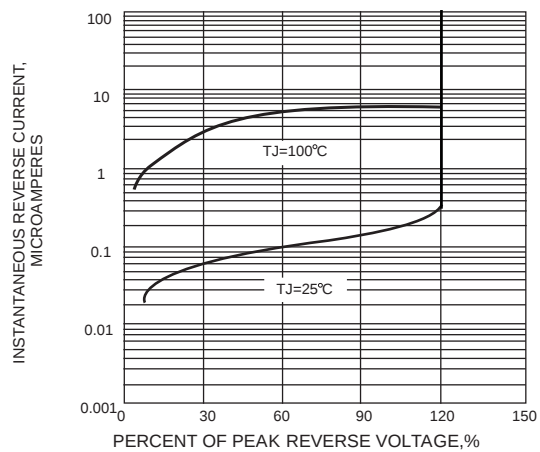


FIG. 5-TYPICAL JUNCTION CAPACITANCE

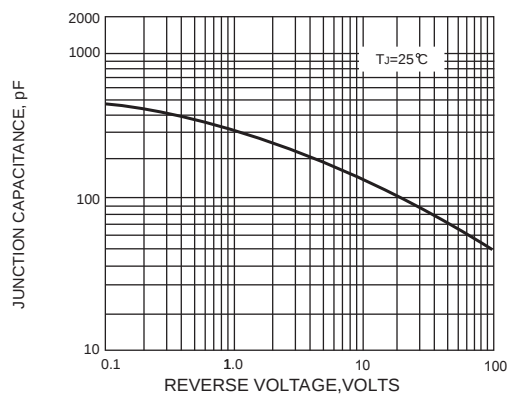
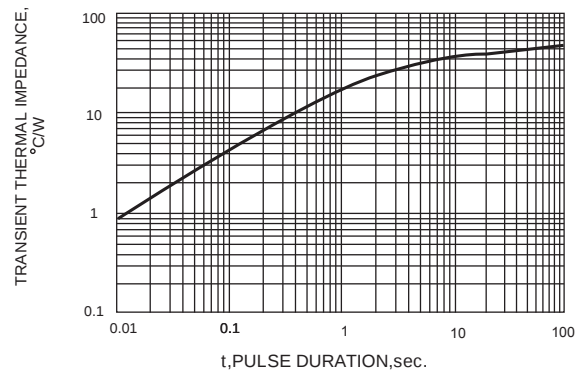
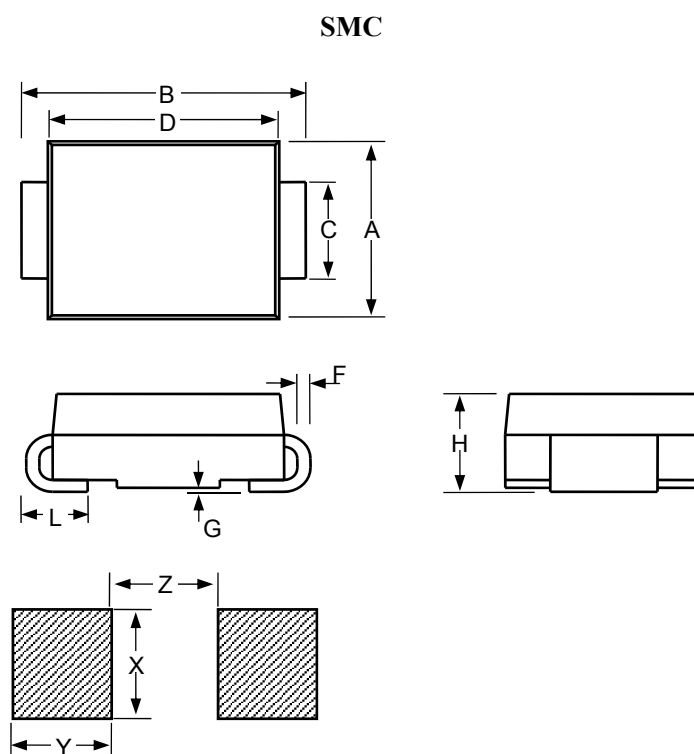


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE



»Package Information



SMC						
Dimension	Inches			Millimeters		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.22		0.245	5.59		6.22
B	0.301		0.325	7.65		8.25
C	0.106		0.13	2.7		3.3
D	0.26		0.28	6.6		7.11
F	0.006		0.012	0.15		0.305
G	-		0.008	-		0.203
H	0.087		0.11	2.2		2.8
L	0.03		0.06	0.76		1.52
X		0.15			3.82	
Y		0.119			3.03	
Z		0.151			3.84	

»Ordering information

Part Number	SS52	SS54	SS56	SS58	SS510	SS515	SS520
Marking	SS52	SS54	SS56	SS58	SS510	SS515	SS520
Base qty	3K	3K	3K	3K	3K	3K	3K