

**SURFACEMOUNTRECTIFIERS**
**S6AC--S6MC**
**FEATURES**

- Low profile package
- For surface mounted applications
- High current capability
- Built-in strain relief, ideal for automated placement
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- High temperature soldering: 250°C/10 seconds at terminals



Lead-free


**MECHANICAL DATA**

- Case: JEDEC DO-214AB, molded plastic over passivated chip
- Terminals: Solder Plated, solderable per MIL-STD- 750, Method 2026
- Polarity: Color band denotes cathode end

**Maximum Ratings**(@TA = 25°C unless otherwise specified)

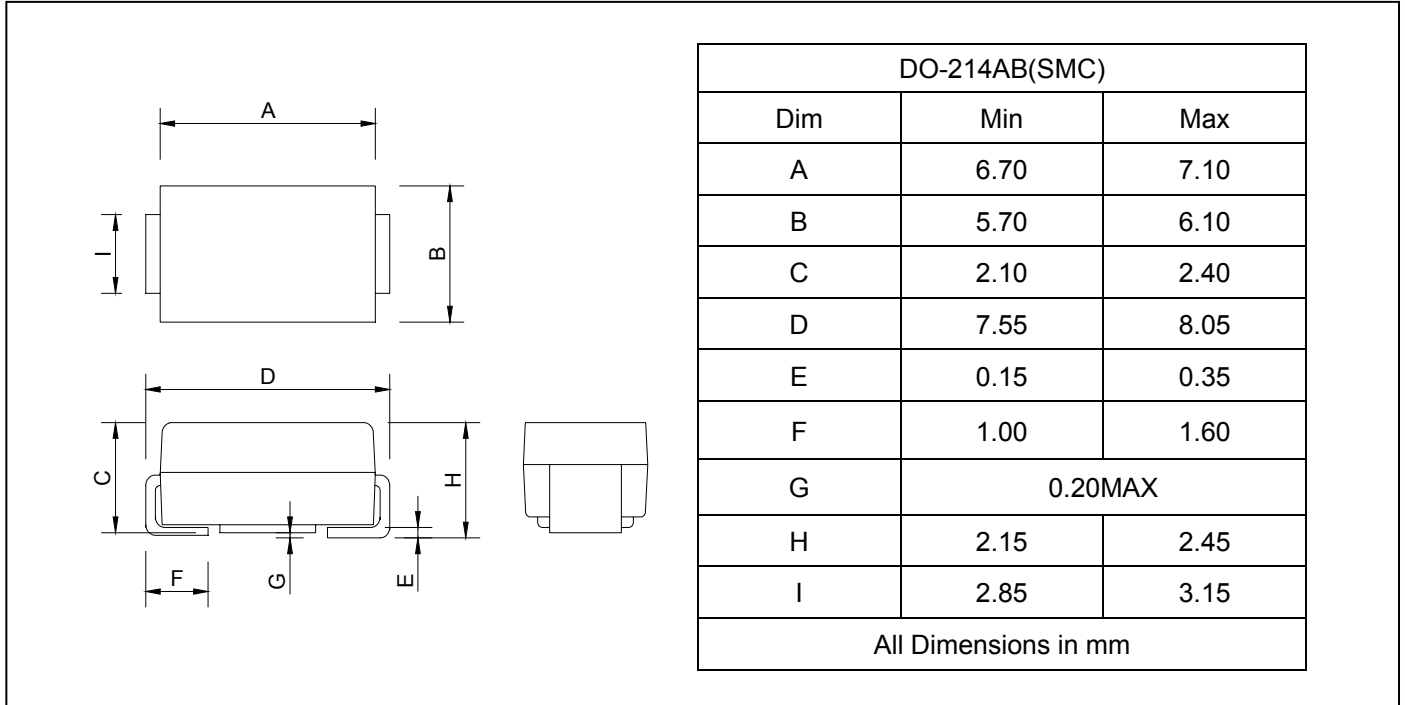
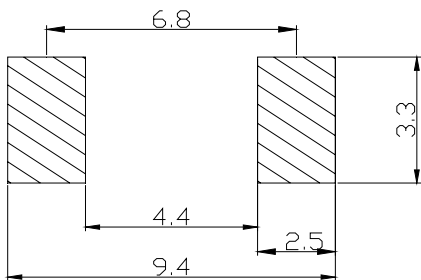
Characteristic	Symbol	S6AC	S6BC	S6DC	S6GC	S6JC	S6KC	S6MC	UNITS
Maximum repetitive peak reverse voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS voltage	$V_{RWS}$	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum average forward rectified current at $T_L=90^\circ\text{C}$	$I_{F(AV)}$	6.0							A
Peak forward surge current 8.3mssingle half-sine-wave superimposed on rated load(JEDEC Method)	$I_{FSM}$	150							A

**Thermal Characteristics**

Characteristic	Symbol	S6AC	S6BC	S6DC	S6GC	S6JC	S6KC	S6MC	UNITS
Operating junction and storage temperature range	$T_J T_{STG}$	-55-----+150							°C

**Electrical Characteristics** (@TA = 25°C unless otherwise specified)

Characteristic	Symbol	S6AC	S6BC	S6DC	S6GC	S6JC	S6KC	S6MC	UNITS
Maximum Instantaneous Forward Voltage at 6.0A	$V_F$	1.15							V
Maximum DC reverse current $T_A=25^\circ\text{C}$ at rated DC blocking voltage $T_A=125^\circ\text{C}$	$I_R$	10 250							$\mu\text{A}$

**SURFACEMOUNTRECTIFIERS**
**S6AC--S6MC**
**PACKAGE OUTLINE DIMENSIONS**

**SOLDERING FOOTPRINT**


Unit : mm

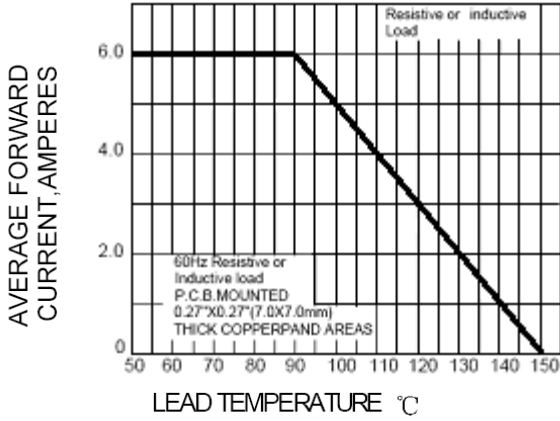
**PACKAGE INFORMATION**

Device	Package	Shipping
S6AC--S6MC	DO-214AB(SMC)	3000/Tape&Reel

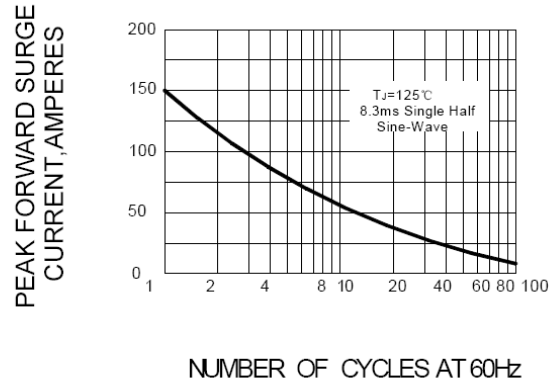
**SURFACEMOUNTRECTIFIERS**

**S6AC--S6MC**

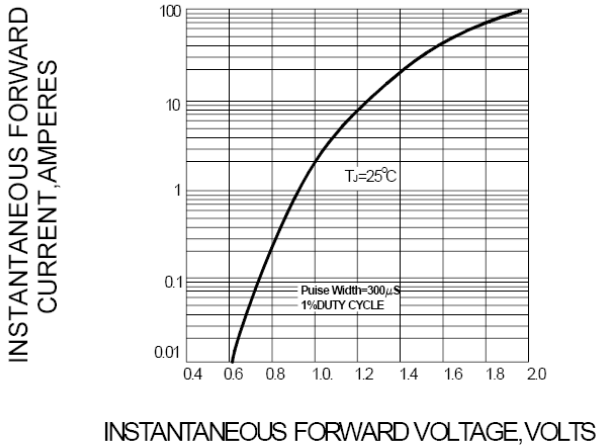
**FIG.1 -- FORWARD DERATING CURVE**



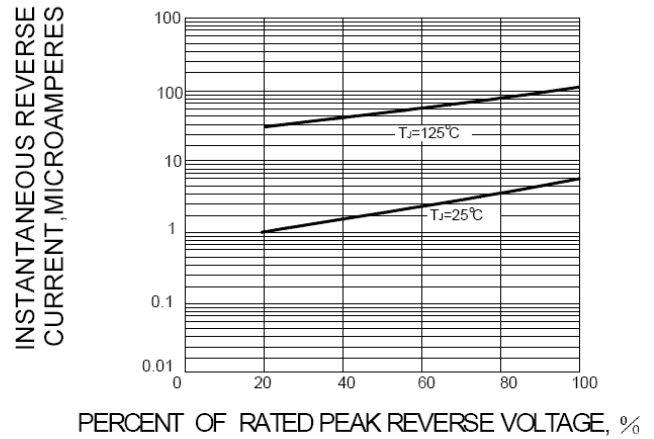
**FIG.2 PEAK FORWARD SURGE CURRENT**



**FIG.3 -- TYPICAL FORWARD CHARACTERISTICS**



**FIG.4 -- TYPICAL REVERSE CHARACTERISTICS**



**FIG.5-TYPICAL JUNCTION CAPACITANCE**

