



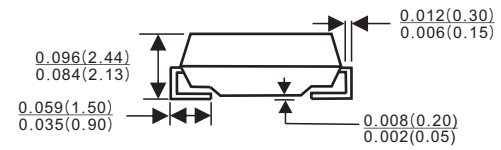
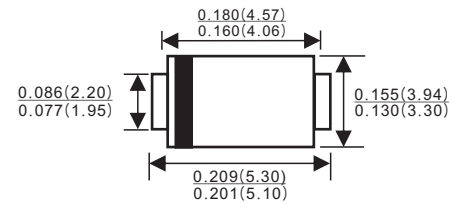
Features

- ✧ Ideal for automated placement
- ✧ Ultra low forward voltage drop, low power losses
- ✧ High efficiency Operation
- ✧ Low thermal resistance
- ✧ Lead free in comply with EU RoHS 2011/65/EU directives.
- ✧ Green molding compound as per IEC61249 Std. . (Halogen Free)

Mechanical Data

- ✧ Case: JEDEC SMB, molded plastic over passivated chip
- ✧ Polarity: Color band denotes cathode end
- ✧ Weight: 0.093 gram

SMB/DO-214AA



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified

Parameter		SS860TB	UNITS
Marking code		SS860T	
Maximum recurrent peak reverse voltage	V_{RRM}	60	V
Maximum RMS voltage	V_{RWS}	42	V
Maximum DC blocking voltage	V_{DC}	60	V
Maximum average forward rectified current at T_L (SEE FIG.1) (NOTE 2)	$I_{(AV)}$	8.0	A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	150	A
Maximum instantaneous forward voltage at 8.0A (NOTE 1)	V_F	0.53	V
Typical Junction Capacitance ($V_R=4V$, $f=1MHz$)	C_j	410	pF
Maximum DC reverse current @ $T_A=25^\circ C$ at rated DC blocking voltage (NOTE1) @ $T_A=100^\circ C$	I_R	0.5	mA
		20	
Typical thermal resistance (NOTE2)	$R_{\theta JA}$	55	$^\circ C/W$
	$R_{\theta JL}$	17	
Operating junction temperature range	T_J	-55--- +150	$^\circ C$
Storage temperature range	T_{STG}	-55--- +150	$^\circ C$

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

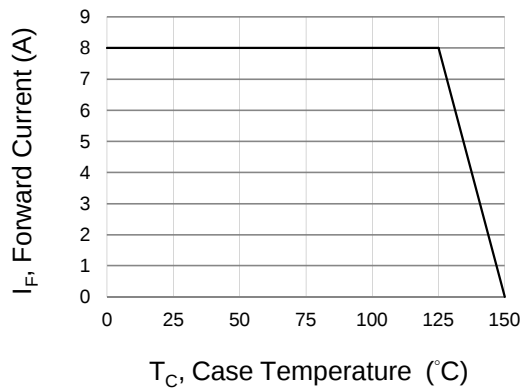


Fig.1 Forward Current Derating Curve

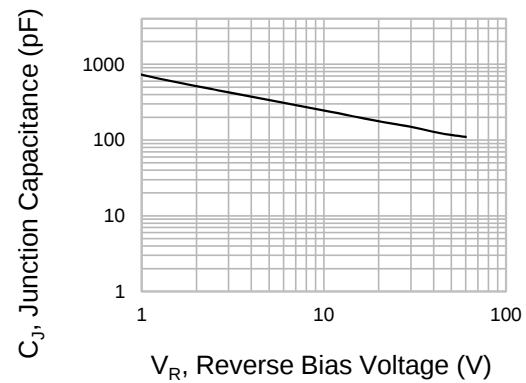


Fig.2 Typical Junction Capacitance

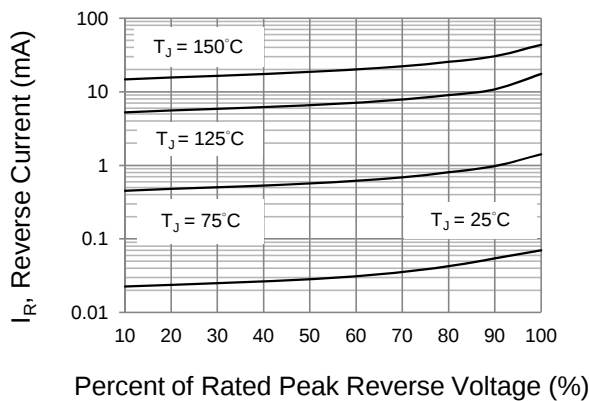
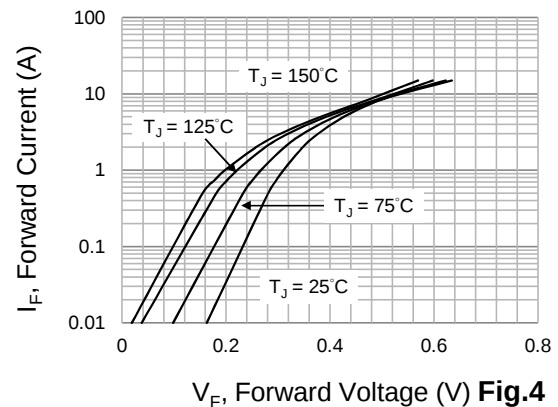


Fig.3 Typical Reverse Characteristics



Typical Forward Characteristics

PACKAGE	SPQ/PCS	CARTON SPQ/PCS	CARTON SIZE/CM	CARTON GW/KG	CARTON NW/KG
SMB	3000/REEL	48000	36X35.8X36.5	12.00	11.00