Pb Free Plating Product

SK545BL

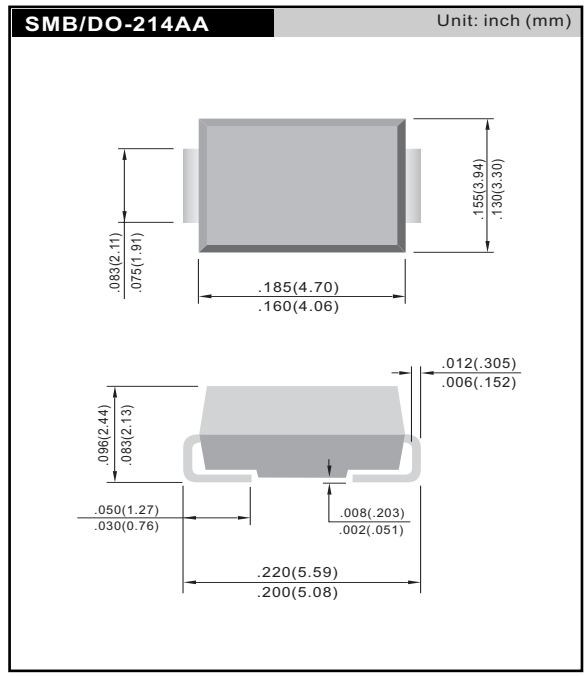
5.0 Ampere,45 Volt Surace Mount Low Vf Schottky Barrier Rectifier

Features

- ✶ Low forward voltage drop
- ✶ High current capability
- ✶ High reliability
- ✶ High surge current capability

Mechanical Data

- ✶ Case: Molded plastic SMB/DO-214AA
- ✶ Epoxy: UL 94V-0 rate flame retardant
- ✶ Terminals: Solderable per MIL-STD-750 method 2026
- ✶ Polarity:Color band denotes cathode end
- ✶ Mounting position: Any
- ✶ Weight: 0.093 gram



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Rating 25℃ ambient temperature unless otherwise s pecified. Single phase half wave, 60Hz, resistive or inductive load.
For capacitive load, de-rate current by 20%.)

Parameter		Symbol	Rating	Unit
Maximum repetitive peak reverse voltage		V_{RRM}	45	V
Maximum RMS voltage		V_{RMS}	31.5	V
Maximum DC Blocking Voltage		V_{DC}	45	V
Maximum average forward rectified current		$I_{F(AV)}$	5	A
Peak Forward Current @ 8.3 ms Half Sine		$I_{FSM(Min.)}$	100	A
Maximum Instantaneous Forward Voltage @ I_F=5A		V_F	0.45	V
Maximum DC Reverse Current At Rated DC Blocking	T_C=25°C	I_R	0.5	mA
	T_C=100°C		50	
Typical Junction Capacitance [1]		C_J	400	pF
Typical Thermal Resistance		$R_{\theta JA}$	60	℃/W
Typical Thermal Resistance		$R_{\theta JC}$	20	℃/W
Operating And Storage Temperature Range		T_J ,T_{STG}	-55~125, -50~150	℃

Note:
1. Measured at 1.0MHZ and applied reverse voltage of 4.0V DC.

FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

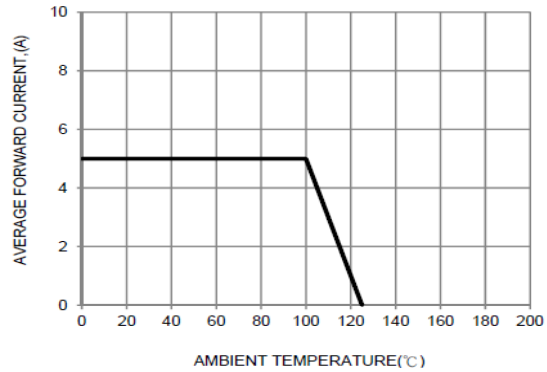


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

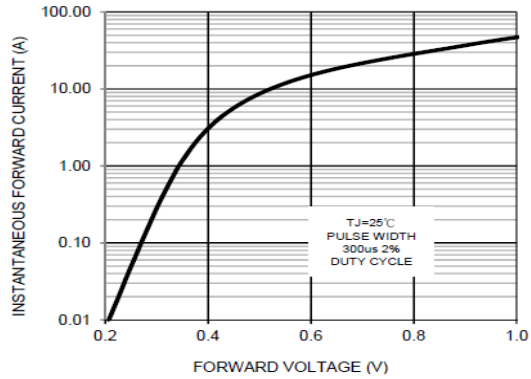


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

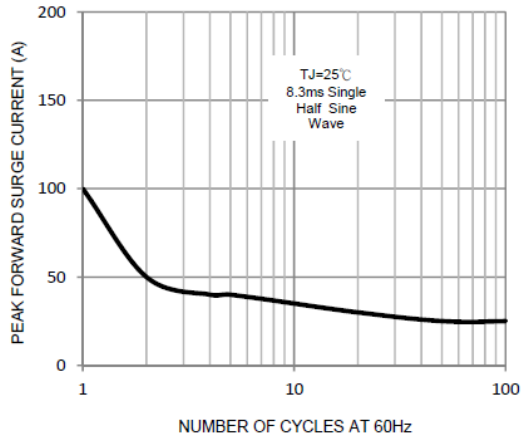


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

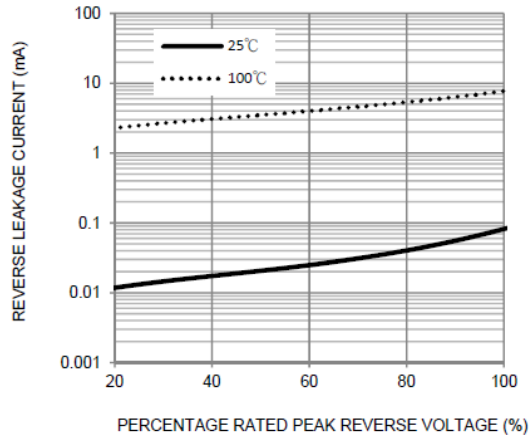


FIG. 5-TYPICAL JUNCTION CAPACITANCE