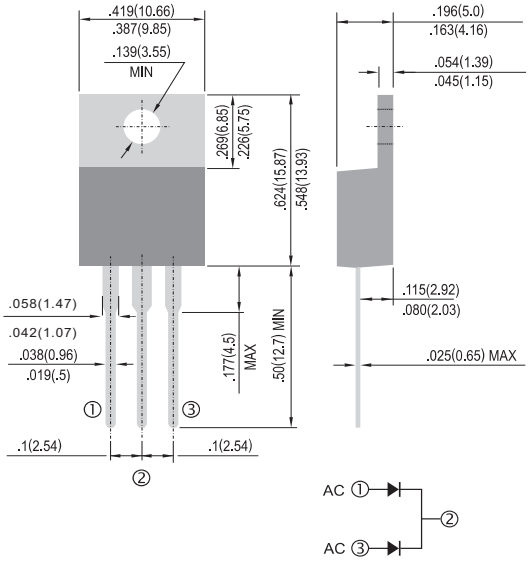
PANJIT SEMI CONDUCTOR

SB2045LCT

LOW VF SCHOTTKY RECTIFIER

VOLTAGE 45 Volts **CURRENT** 20 Amperes

TO-220AB Unit: inch (mm)



FEATURES

- Low forward voltage drop, low power losses
- High efficiency operation
- In compliance with EU RoHS 2002/95/EC directives

MECHANICAL DATA

Case : TO-220AB, Plastic

Terminals : Solderable per MIL-STD-750, Method 2026

Weight: 0.0655 ounces, 1.859 grams

MAXIMUM RATINGS(T_A=25°C unless otherwise noted)

PARAMETER		SYMBOL	VALUE	UNIT
Maximum repetitive peak reverse voltage		V_{RRM}	45	V
Maximum average forward rectified current	per device per diode	$I_{F(AV)}$	20 10	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load per diode	per diode	I_{FSM}	145	A
Typical thermal resistance		$R_{\Theta JC}$	2.5	°C / W
Operating junction		T_J	-55 to + 125	°C
Storage temperature range		T_{STG}	-55 to + 150	°C

ELECTRICAL CHARACTERISTICS(T_A=25°C unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITIONS		MIN.	TYP.	MAX.	UNIT
Breakdown voltage	V_{BR}	I_R=1mA		50	-	-	V
Instantaneous forward voltage per diode (1)	V_F	I_F=5A I_F=10A	T_J=25°C	- -	0.42 0.46	0.46 0.52	V
Reverse current per diode (2)	I_R	V_R=45V	T_J=25°C T_J=100°C	- -	100 -	500 100	μA mA

Note.1.Pulse test : 300μs pulse width, 1% duty cycle

2Pulse test : pulse width ≤ 40ms

SB2045LCT

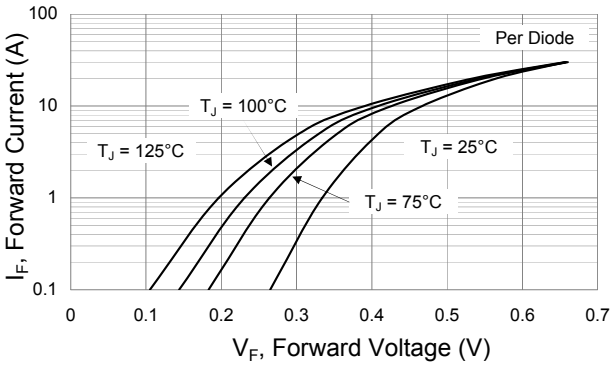


Fig.1 Typical Forward Characteristics

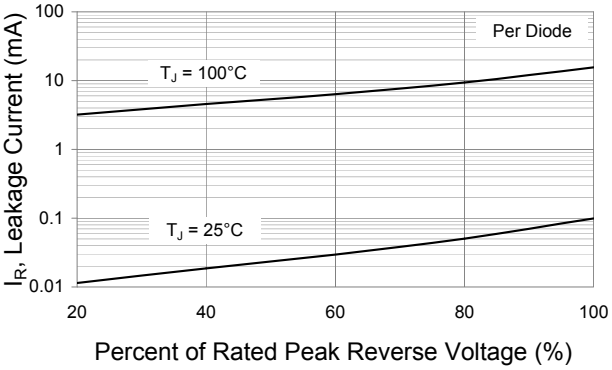


Fig.2 Typical Reverse Characteristics

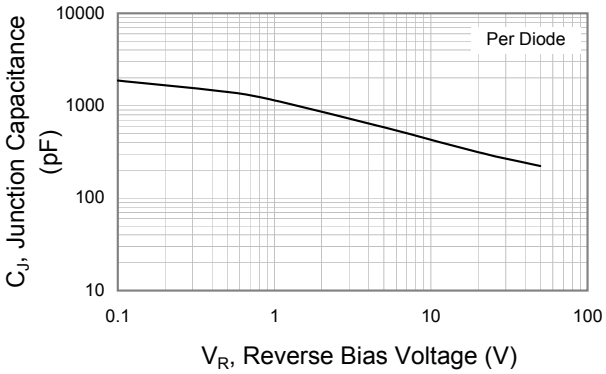


Fig.3 Typical Junction Capacitance

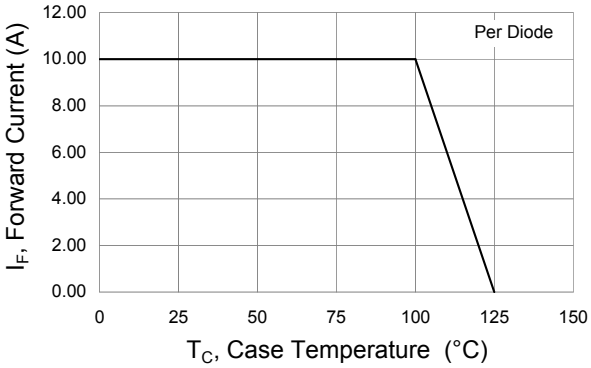


Fig.4 Forward Current Derating Curve