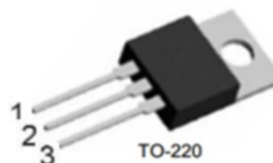


Features

- Ultra Low Forward Voltage Drop
- Excellent High Temperature Stability
- Patented Super Barrier Rectifier Technology
- Soft, Fast Switching Capability

Mechanical Data

- Case: TO-220AB,
- Case Material: Molded Plastic, UL Flammability Classification Rating 94V-0
- Terminals: Matte Tin Finish annealed over Copper leadframe. Solderable per MIL-STD-202, Method 208



MAXIMUM RATINGS($T_A=25^{\circ}\text{C}$ unless otherwise noted)

PARAMETER	SYMBOL	VALUE	UNIT
Maximum repetitive peak reverse voltage	V_{RRM}	45	V
Maximum rms voltage	V_{RMS}	31.5	V
Maximum average forward rectified current	$I_{F(AV)}$	20 10	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	150	A
Typical junction capacitance ($V_R=4\text{V}$, $f=1\text{MHz}$)	C_J	860	pF
Typical thermal resistance per diode (Note 1)	$R_{\theta JC}$	2	$^{\circ}\text{C/W}$
Operating junction temperature range	T_J	-55 to + 150	$^{\circ}\text{C}$
Storage temperature range	T_{STG}	-55 to + 150	$^{\circ}\text{C}$

Note : 1. Mounted on infinite heatsink.

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

PARAMETER	SYMBOL	TEST CONDITIONS	MIN.	TYP.	MAX.	UNIT
Breakdown voltage per diode	V _{BR}	I _R =0.5mA	45	-	-	V
Instantaneous forward voltage per diode	V _F	I _F =1A	-	0.30	-	V
		I _F =5A	-	0.38	-	
		I _F =10A	-	0.45	0.50	
		I _F =1A	-	0.20	-	V
		I _F =5A	-	0.31	-	
		I _F =10A	-	0.39	-	
Reverse current per diode	I _R	V _R =36V	-	100	-	μA
		V _R =45V	-	-	100	μA
		T _J =25°C	-	35	-	mA
		T _J =125°C	-	-	-	

RATING AND CHARACTERISTIC CURVES

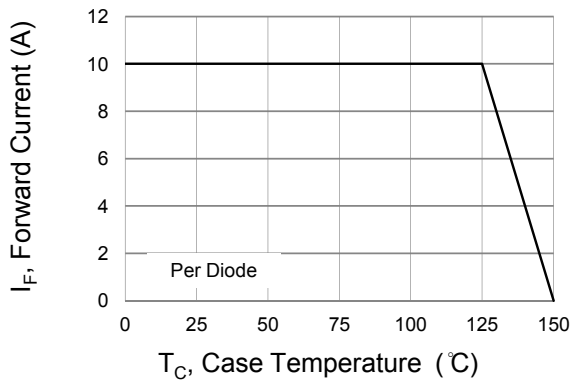


Fig.1 Forward Current Derating Curve

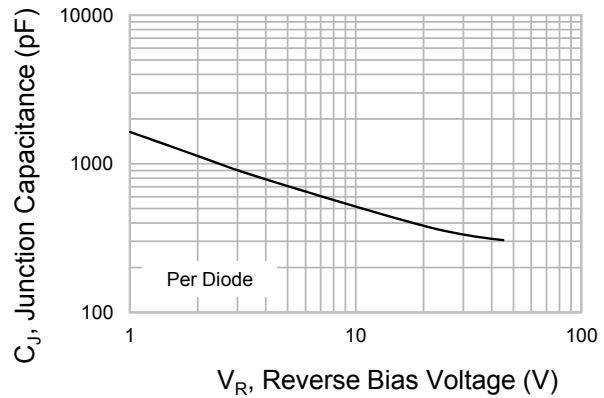


Fig.2 Typical Junction Capacitance

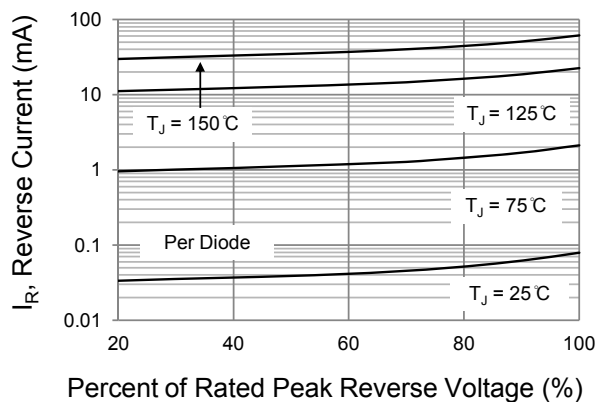


Fig.3 Typical Reverse Characteristics

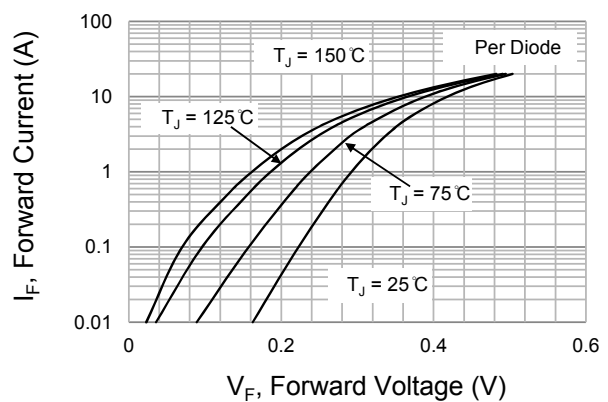


Fig.4 Typical Forward Characteristics