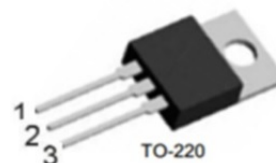


Features

- 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}	60	V
Maximum average forward rectified current	$I_{F(AV)}$	30 15	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	250	A
Typical junction capacitance ($V_R=4\text{V}$, $f=1\text{MHz}$)	C_J	650	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($T_A=25^{\circ}\text{C}$ unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN.	TYP.	MAX.	UNIT
Breakdown voltage per diode	V_{BR}	$I_R=0.5\text{mA}$	60	-	-	V
Instantaneous forward voltage per diode	V_F	$I_F=3\text{A}$	-	0.36	-	V
		$I_F=5\text{A}$ $T_J=25^{\circ}\text{C}$	-	0.40	-	V
		$I_F=15\text{A}$	-	0.55	0.60	V
		$I_F=3\text{A}$ $T_J=125^{\circ}\text{C}$	-	0.29	-	V
Reverse current per diode	I_R	$V_R=42\text{V}$	-	30	-	μA
		$V_R=60\text{V}$ $T_J=25^{\circ}\text{C}$	-	-	220	μA
		$T_J=125^{\circ}\text{C}$	-	16	-	mA

RATING AND CHARACTERISTIC CURVES

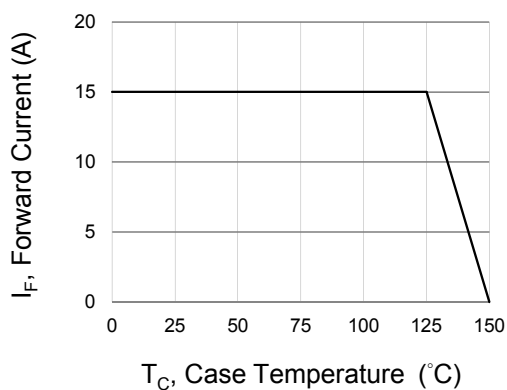


Fig.1 Forward Current Derating Curve

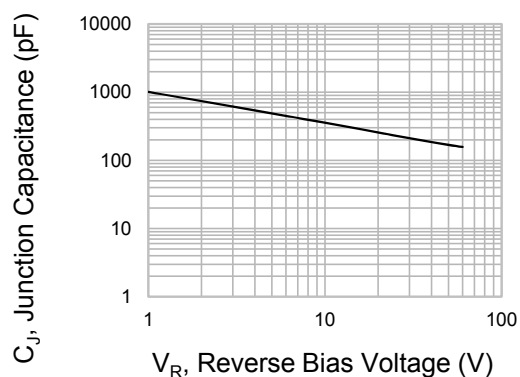


Fig.2 Typical Junction Capacitance

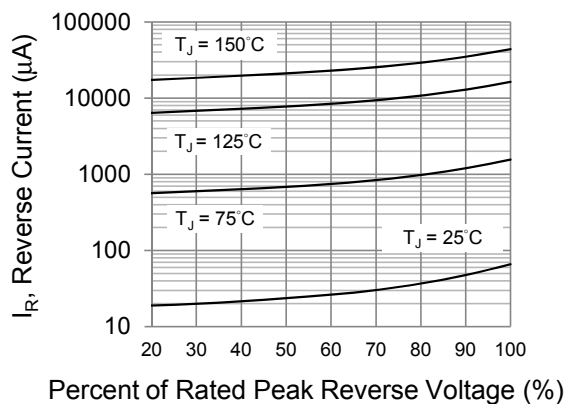


Fig.3 Typical Reverse Characteristics

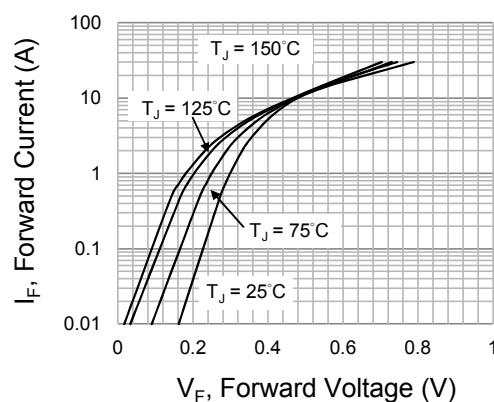


Fig.4 Typical Forward Characteristics