

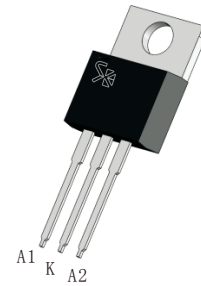
16.0 A Switchmode Power Rectifiers

Features

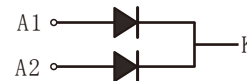
- Ultrafast 35 and 60 Nanosecond Recovery times
- Popular TO-220 Package
- High temperature glass passivated junction
- High voltage capability to 600 volts
- Low leakage specified @ 150°C case temperature
- Current derating @ both case and ambient temperatures

Mechanical data

- Case: TO-220AB
- Approx. Weight: 1.9g (0.067oz)



TO-220



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified

PARAMETER	SYMBOL	MUR1620CT	MUR1640CT	MUR1660CT	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	200	400	600	V
Maximum RMS voltage	V_{RMS}	140	280	420	V
Maximum DC blocking Voltage	V_{DC}	200	400	600	V
Maximum Average Forward Rectified Current @Tc=150°C per leg per device	$I_{F(AV)}$	8.0 16			A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	100			A
Instantaneous forward voltage at 8A per leg	V_F	0.975	1.3	1.5	V
Maximum instantaneous reverse current at rated DC blocking voltage Ta=25°C Ta=125°C	I_R	5 250	10 500		uA
Maximum Reverse Recovery Time NOTE 1	trr	25	50		ns
Maximum Thermal Resistance Junction To Case	$R_{\theta JC}$	4			°C/W
Operation Junction Temperature and Storage Temperature	T_j, T_{stg}	-65 ~ +175			°C

NOTE 1: Reverse recovery test conditions $I_F=0.5A, I_R=1.0A, I_{rr}=0.25A$

Fig.1 TYPICAL FORWARD CURRENT DERATING CURVE

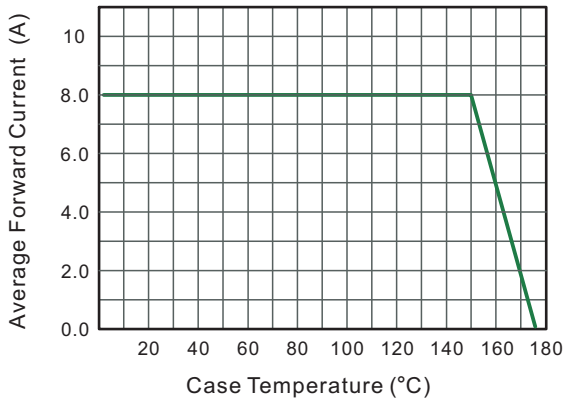


Fig.2 Typical Reverse Characteristics

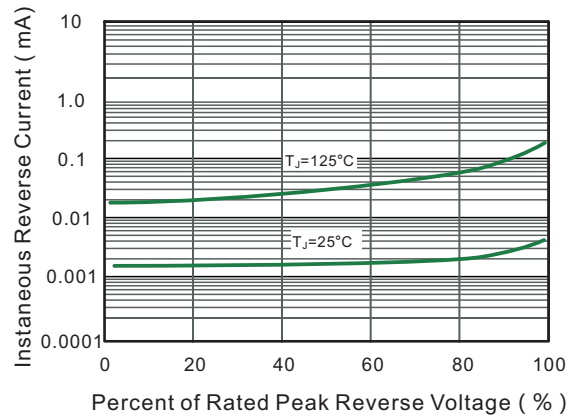


Fig.3 Typical Forward Characteristics PER LEG

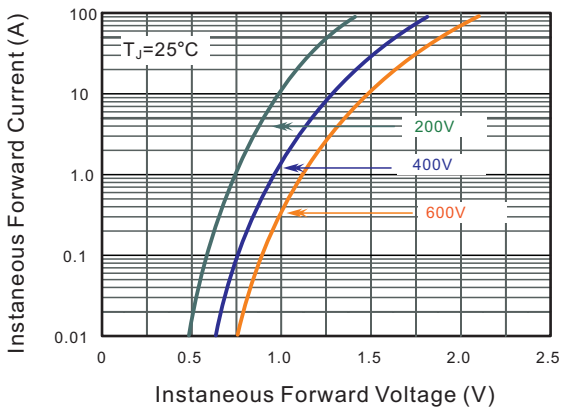
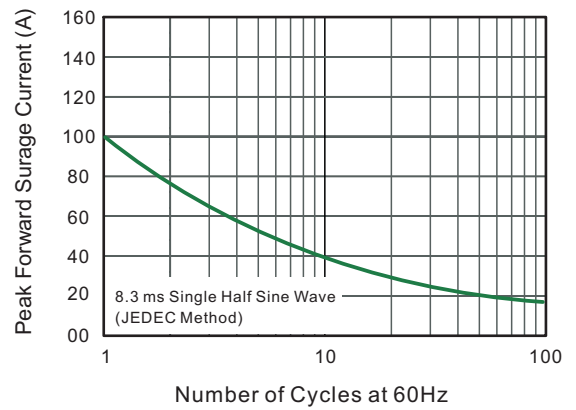


Fig.4 Maximum Non-Repetitive Peak Forward Surge Current



PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

TO-220

