

SCHOTTKY BARRIER RECTIFIER

Features

- ◆ High surge capacity.
For use in low voltage, high frequency inverters, free
- ◆ wheeling, and polarity protection applications.
Metal silicon junction, majority carrier conduction.
- ◆ High current capability, low forward voltage drop.
- ◆ Guard ring for over voltage protection.

ITO-220AB

PIN



Maximum Ratings And Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

Parameter	SYMBOLS	MBRF 1045CT	MBRF 1060CT	MBRF 10100CT	MBRF 10150CT	MBRF 10200CT	UNITS
Marking Code							
Maximum repetitive peak reverse voltage	V _{RRM}	45	60	100	150	200	V
Maximum RMS voltage	V _{RMS}	32	42	70	135	140	V
Maximum DC blocking voltage	V _{Dc}	45	60	100	150	200	V
Maximum average forward rectified current (see fig.1)	I _(AV)	10.0					A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	150			125		A
Maximum instantaneous forward voltage at 5.0A	V _F	0.60	0.75	0.85	0.95		V
Maximum DC reverse current T _A =25℃ at rated DC blocking voltage T _A =100℃	I _R	1.0			0.1		mA
		15.0	50.0		15.0		
Typical thermal resistance (NOTE 2)	R _{θJC}	2.0			1.5		℃/W
Operating junction temperature range	T _J	-55 to +150					℃
storage temperature range	T _{STG}	-55 to +150					℃

Note:2.Thermal resistance from junction to case.

Ratings And Characteristic Curves

Fig.1 Typical Forward Current Derating Curve

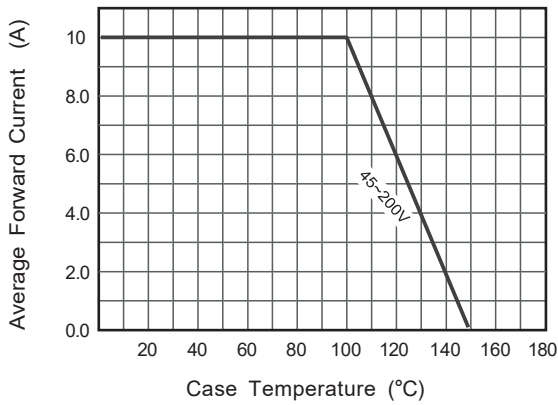


Fig.2 Typical Reverse Characteristics

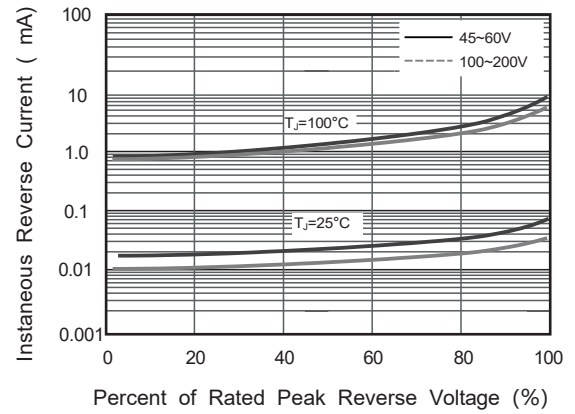


Fig.3 Typical Forward Characteristic(per leg)

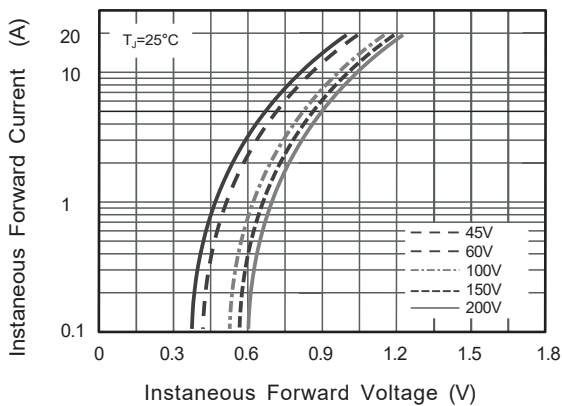
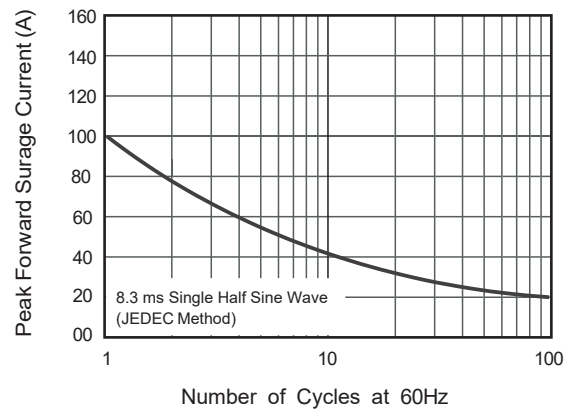


Fig.4 Maximum Non-Repetitive Peak Forward Surge Current



The curve above is for reference only.