

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (TA=25°C)

RATINGS	SYMBOL	MBR 1540CT 1540FCT 1540WCT 1540DCT	MBR 1545CT 1545FCT 1545WCT 1545DCT	MBR 1560CT 1560FCT 1560WCT 1560DCT	MBR 15100CT 15100FCT 15100WCT 15100DCT	MBR 15150CT 15150FCT 15150WCT 15150DCT	MBR 15200CT 15200FCT 15200WCT 15200DCT	UNIT
Maximum repetitive reverse voltage	VRRM	40	45	60	100	150	200	V
Maximum RMS voltage	VRMS	28	32	42	70	105	140	V
Maximum DC blocking voltage	VDC	40	45	60	100	150	200	V
Maximum average forward current per device per diode	I _{AV}	15 7.5						A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	150						A
Typical thermal resistance (Note 1) TO-220AB ITO-220AB TO-262AB TO-263(D ² PAK)	R _{θ-JC}	2.0 4.5 2.5 2.5						°C/W
Operating junction temperature range	T _J	-55 to +150				-55 to +175		°C
Storage temperature range	T _{STG}	-55 to +175						°C
CHARACTERISTICS	SYMBOL	MBR 1540CT 1540FCT 1540WCT 1540DCT	MBR 1545CT 1545FCT 1545WCT 1545DCT	MBR 1560CT 1560FCT 1560WCT 1560DCT	MBR 15100CT 15100FCT 15100WCT 15100DCT	MBR 15150CT 15150FCT 15150WCT 15150DCT	MBR 15200CT 15200FCT 15200WCT 15200DCT	UNIT
Maximum forward voltage per leg at I _F =7.5A	V _F	0.65		0.75	0.85	0.92		V
Maximum average reverse current at rated DC blocking voltage T _J =25°C T _J =125°C	I _R	0.10 15			0.01 5			mA

Notes: 1. Thermal resistance from junction to case.

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

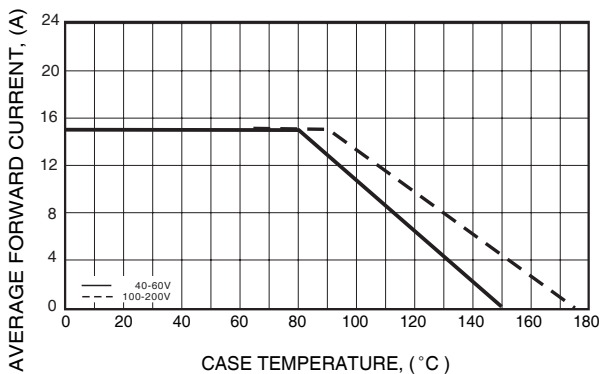


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

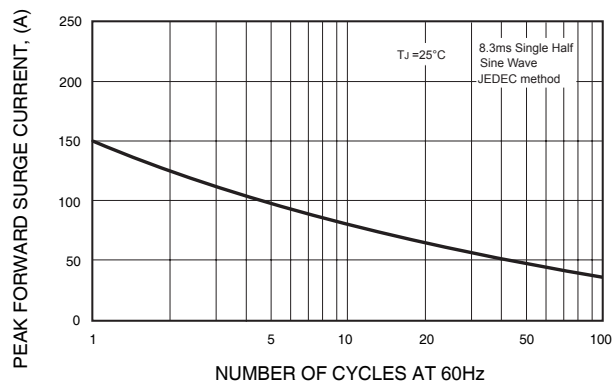


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

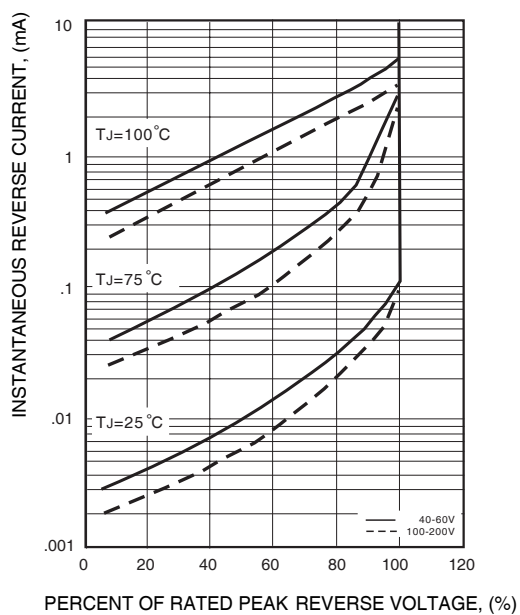


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

