

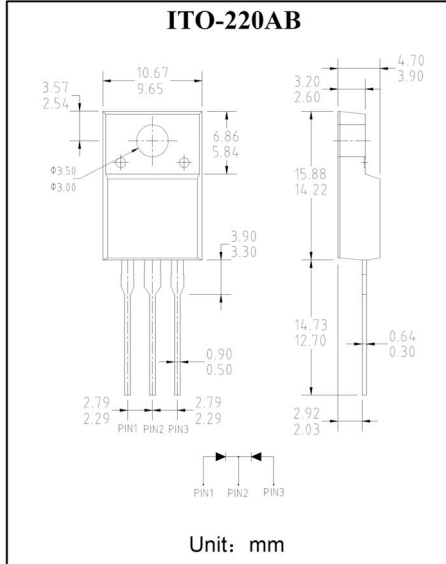


SHANGSI

MBRF2035CT thru MBRF20200CT

塑封肖特基整流二极管
反向电压 35 --- 200 V
正向电流 20.0A

Plastic Schottky Barrier Rectifiers
Reverse Voltage 35 to 200 V
Forward Current 20.0 A



特征 Features

- 塑料包装符合UL易燃性等级94V-O Plastic package has Underwriters Laboratory Flammability Classification 94V-O.
- 低的反向漏电流 Low reverse leakage
- 较强的正向浪涌承受能力 High forward surge capability
- 高温焊接保证 High temperature soldering guaranteed:
260°C/10秒 260°C/10 seconds at terminals
- 引线 and 管体皆符合 RoHS 标准。Lead and body according with RoHS standard

机械数据 Mechanical Data

- 封装: 塑料封装 Case: Molded plastic body
- 端子: 焊料被镀 Terminals: Solder plated
- 极性: 标记印于本体 Polarity: Symbols marked on body
- 安装位置: 任意 Mounting Position: Any
- 安装扭矩: 推荐值 0.3牛*米 Mounting torque: Recommend 0.3 N*m

极限值和温度特性 $T_A = 25^\circ\text{C}$ 除非另有规定。

Maximum Ratings & Thermal Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

	Symbols	MBRF20 35CT	MBRF20 45CT	MBRF20 50CT	MBRF20 60CT	MBRF20 100CT	MBRF20 200CT	Unit
最大反向峰值电压 Maximum repetitive peak reverse voltage	V_{RRM}	35	45	50	60	200	200	V
最大反向有效值电压 Maximum RMS voltage	V_{RMS}	24	31	35	42	72	140	V
最大直流阻断电压 Maximum DC blocking voltage	V_{DC}	35	45	50	60	200	200	V
最大正向平均整流电流 Maximum average forward rectified current	$I_{F(AV)}$	20.0 10 (per leg)						A
正向峰值浪涌电流 8.3ms单一正弦半波 Peak forward surge current 8.3 ms single half sine-wave	I_{FSM}	150						A
典型热阻 Typical thermal resistance	$R_{\theta JC}$	1.5				3.5		°C/W
工作结温和存储温度 Operating junction and storage temperature range	T_J, T_{STG}	-65---+150						°C

电特性 $T_A = 25^\circ\text{C}$ 除非另有规定。

Electrical Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

	Symbols	MBRF20 35CT	MBRF20 45CT	MBRF20 50CT	MBRF20 60CT	MBRF20 100CT	MBRF20 200CT	Unit
最大正向电压 $I_F = 10.0A$ Maximum forward voltage $T_A = 25^\circ\text{C}$ $T_A = 100^\circ\text{C}$	V_F	0.60 0.54		0.80 0.75		0.85 0.75	0.99 0.87	V
最大反向漏电流 Maximum reverse current $T_A = 25^\circ\text{C}$ $T_A = 125^\circ\text{C}$	I_R	0.1 50		0.15 150		1.0 50		mA
典型结电容 $V_R = 4.0V, f = 1\text{MHzMAX.}$ Type junction capacitance	C_j	400		310				pF



MBRF2035CT thru MBRF20200CT

特性曲线 Characteristic Curves

FIG.1- FORWARD CURRENT DERATING CURVE

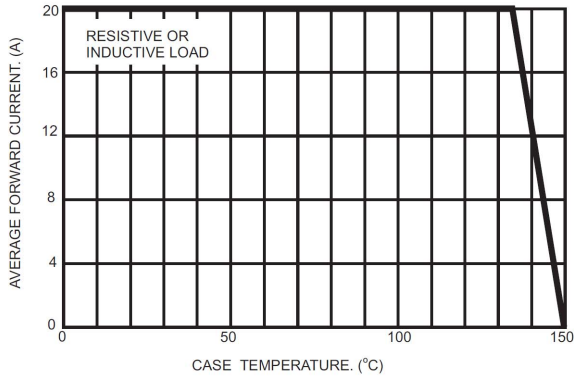


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

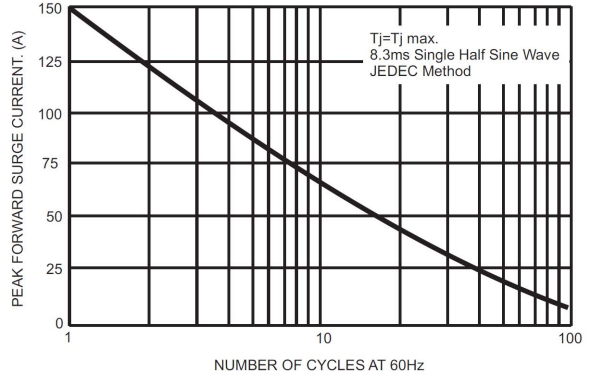


FIG.3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER LEG

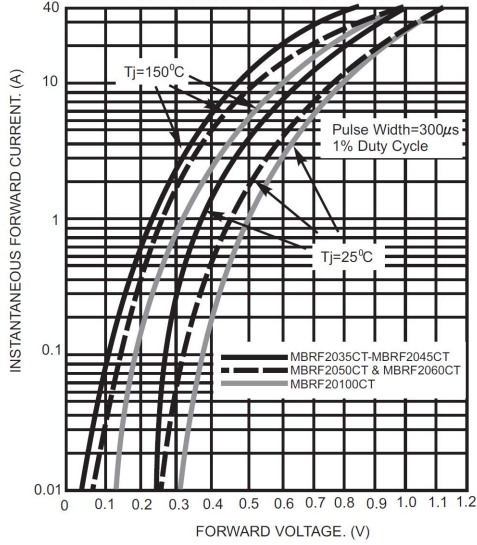


FIG.4- TYPICAL REVERSE CHARACTERISTICS PER LEG

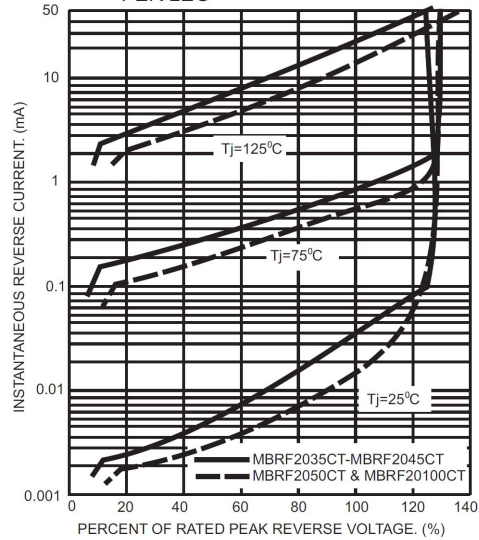


FIG.5- TYPICAL JUNCTION CAPACITANCE PER LEG

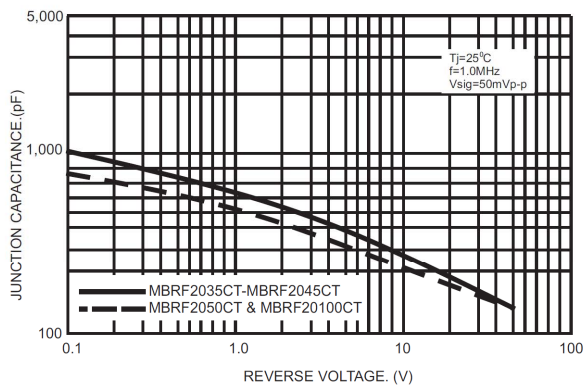


FIG.6- TYPICAL TRANSIENT THERMAL IMPEDANCE PER LEG

