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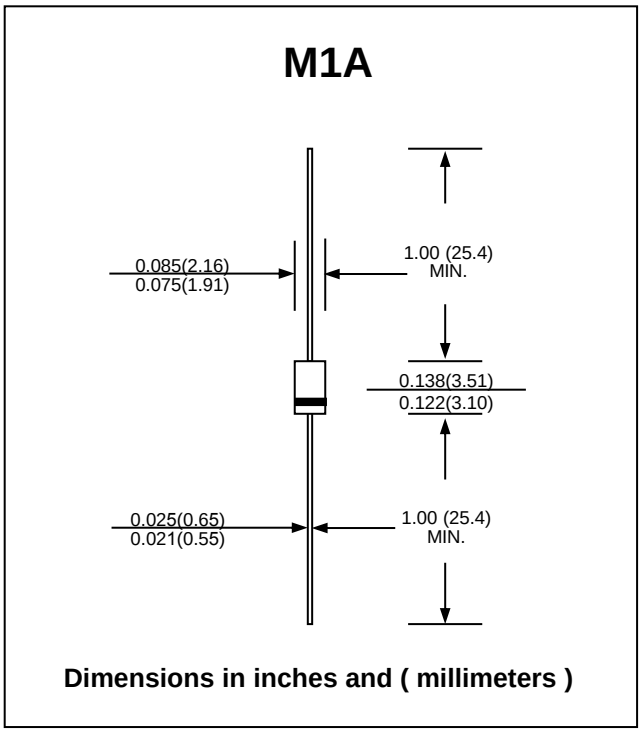
TVR5B

GLASS PASSIVATED JUNCTION FAST RECOVERY DIODE

PRV : 100 Volts
Io : 0.5 Amperes



FEATURES :

* Glass passivated junction chip
* High surge current capability
* High reliability
* Low reverse current
* Low forward voltage drop
* Fast switching for high efficiency
* Pb / RoHS Free

MECHANICAL DATA :

* Case : M1A Molded plastic
* Epoxy : UL94V-O rate flame retardant
* Lead : Axial lead solderable per MIL-STD-202, Method 208 guaranteed
* Polarity : Color band denotes cathode end
* Mounting position : Any
* Weight : 0.20 gram (approximately)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.

RATING	SYMBOL	VALUE	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	100	V
Maximum Average Forward Current	$I_{F(AV)}$	0.5	A
Maximum Peak One Cycle Surge Forward Current (Non-Repetitive, f = 50 Hz)	I_{FSM}	20	A
Maximum Peak Forward Voltage at I_F = 0.5 A	V_F	1.2	V
Maximum Repetitive Peak Reverse Current at V_{RRM}	I_R	10	µA
Maximum Reverse Recovery Time	Trr	1.5 (1) 500 (2)	µs
Junction Temperature Range	T_J	- 40 to + 125	°C
Storage Temperature Range	T_{STG}	- 40 to + 125	°C

Notes :

(1) Reverse Recovery Test Conditions : I_F = 20 mA, I_R = 1 mA.

(2) Reverse Recovery Test Conditions : I_F = 100 mA, I_R = 100 mA.

RATING AND CHARACTERISTIC CURVES (TVR5B)

FIG.1 - AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

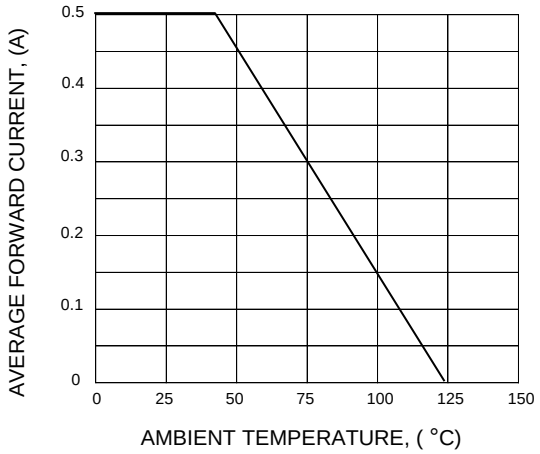


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

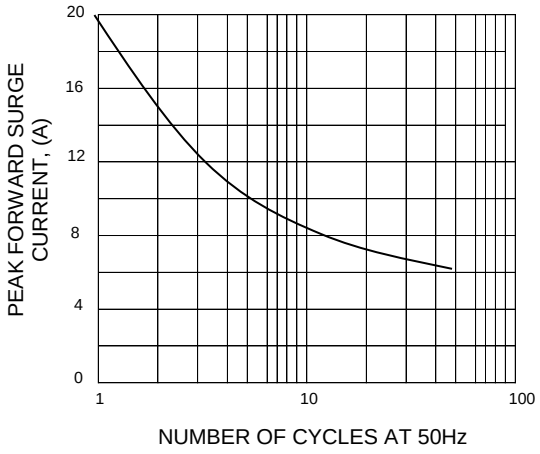


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

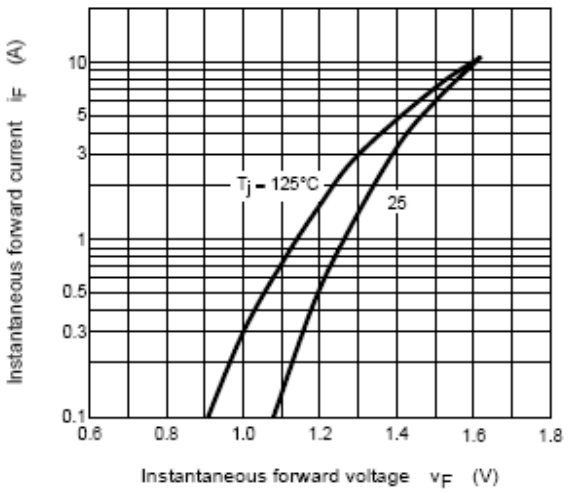


FIG.4 - AVERAGE FORWARD CURRENT VS. AVERAGE FORWARD POWER DISSIPATION