TAYCHIPST

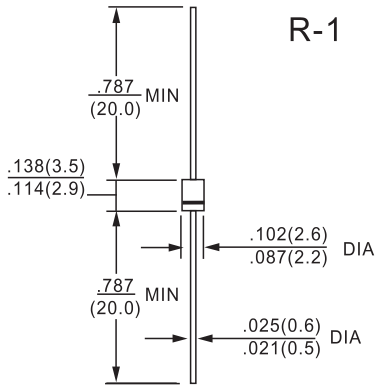
SWITCHING TYPE POWER SUPPLY APPLICATION

05NH46

1000V 0.5A

FEATURES

- Average Forward Current
- Repetitive Peak Reverse Voltage
- Very Fast Reverse-Recovery Time



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

MAXIMUM RATINGS

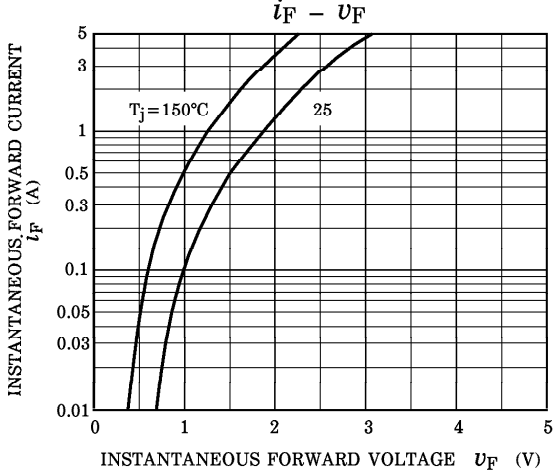
CHARACTERISTIC	SYMBOL	RATING	UNIT
Repetitive Peak Reverse Voltage	V_{RRM}	1000	V
Average Forward Current	$I_{F(AV)}$	0.5	A
Peak One Cycle Surge Forward Current(Non-Repetitive)	I_{FSM}	15(50Hz)	A
		17(60Hz)	
Junction Temperature	T_j	-40~150	℃
Storage Temperature Range	T_{stg}	-40~150	℃

ELECTRICAL CHARACTERISTICS

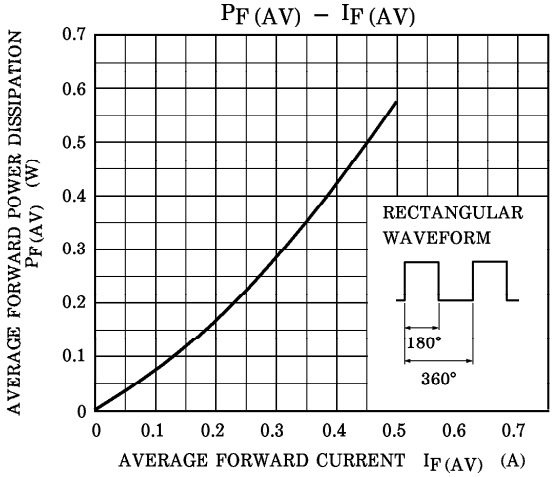
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	TYPE	MAX	UNIT
Peak Forward Voltage	V_{FM}	I_{FM} =0.5A	—	—	1.5	V
Repetitive Peak Reverse Current	I_{RRM}	V_{RRM} =1000V	—	—	100	uA
Reverse Recvery Time	t_{rr}	I_F =1A, di/dt=-30A/us	—	—	200	ns
Forward Recovery Time	t_{fr}	I_F =1A	—	—	750	ns
Thermal Resistance	$R_{th(j-a)}$	Junction to Ambient	—	—	150	℃/W

RATINGS AND CHARACTERISTIC CURVES 05NH46

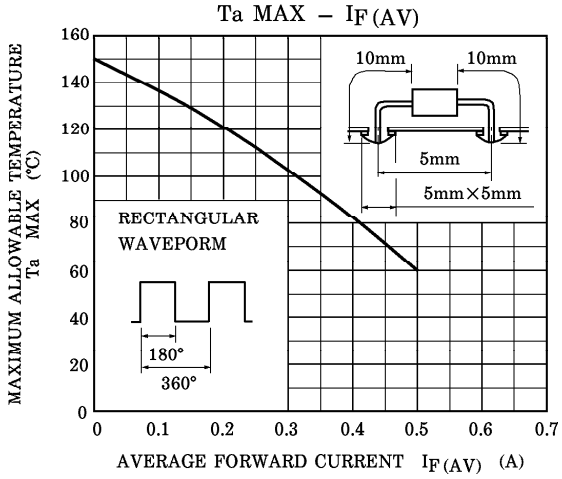
$i_F - v_F$



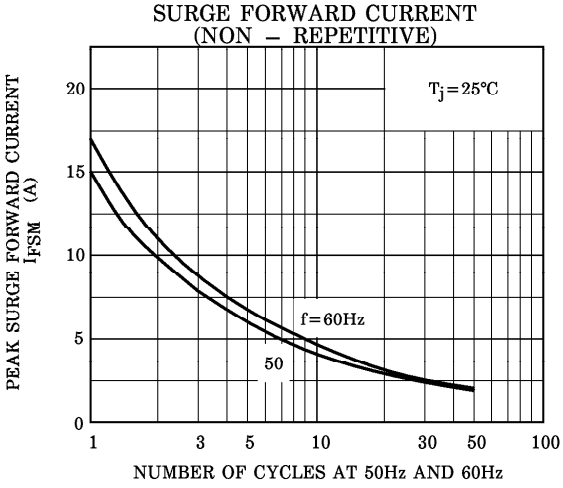
$P_{F(AV)} - I_{F(AV)}$



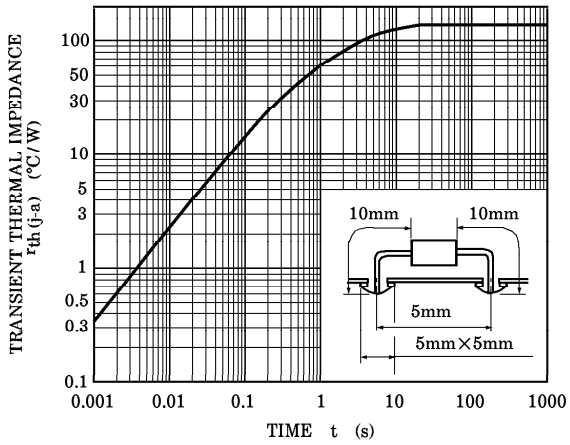
Ta MAX – $I_{F(AV)}$



SURGE FORWARD CURRENT (NON – REPETITIVE)



$r_{th(j-a)} - t$



$C_j - V_R$ (TYPICAL)

