

PNP SILICON HIGH FREQUENCY TRANSISTOR

DESCRIPTION:

The **ASI MRF545** is designed for High Frequency and medium and high resolution color video display monitors as well as other Applications requiring high breakdown characteristics.

MAXIMUM RATINGS

I_C	400 mA
V_{CE}	70 V
V_{CB}	100 V
P_{DISS}	3.5 W @ $T_C = 25^\circ\text{C}$ 20 mW/°C @ $T_C = 25^\circ\text{C}$
T_J	-65 °C to +200 °C
T_{STG}	-65 °C to +200 °C
θ_{JC}	50 °C/W

PACKAGE STYLE TO-39

SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN.	MAX.	MIN.	MAX.
ϕa	0.190	0.210	4.83	5.33
A	0.240	0.260	6.10	6.60
ϕb	0.016	0.021	0.406	0.533
ϕb_2	0.016	0.019	0.406	0.483
ϕD	0.350	0.370	8.89	9.40
ϕD_1	0.315	0.335	8.00	8.51
h	0.009	0.125	0.229	3.18
i	0.028	0.034	0.711	0.864
k	0.029	0.040	0.737	1.02
l	0.500		12.70	
i_1		0.050		1.27
i_2	0.250		6.35	
P	0.100		2.54	
Q				
a	45° NOMINAL			
β	90° NOMINAL			

1 = EMITTER 2 = BASE
 3 = COLLECTOR (CASE)

CHARACTERISTICS $T_A = 25^\circ\text{C}$

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CEO}	$I_C = 1.0\text{ mA}$	70			V
BV_{CBO}	$I_C = 100\ \mu\text{A}$	100			V
BV_{EBO}	$I_E = 100\ \mu\text{A}$	3.0			V
I_{CBO}	$V_{CE} = 80\text{ V}$			20	μA
I_{CES}	$V_{CE} = 80\text{ V}$		1.0	100	μA
h_{FE}	$V_{CE} = 6.0\text{ V}$ $I_C = 50\text{ mA}$	15			---
f_t	$V_{CB} = 25\text{ V}$ $I_C = 50\text{ mA}$ $f = 250\text{ MHz}$	1000	1400		MHz
C_{OB}	$V_{CB} = 10\text{ V}$ $f = 1.0\text{ MHz}$		2.5		pF
G_U^{max}	$V_{CB} = 25\text{ V}$ $I_C = 50\text{ mA}$ $f = 200\text{ MHz}$		14		dB
MAG			14.5		dB
$[S_{21}]^2$		11.5	12.5		dB