



SILICON NPN TRIPLE DIFFUSED MESA TYPE

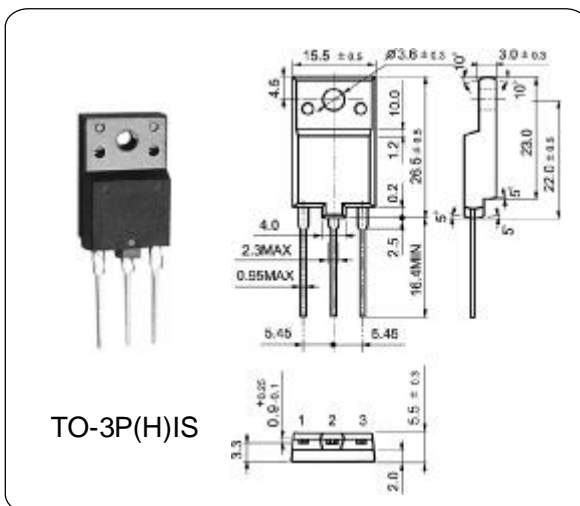
2SD2499

DESCRIPTION

HORIZONTAL DEFLECTION OUTPUT FOR HIGH RESOLUTION DISPLAY, COLOR TV
HIGH SPEED SWITCHING APPLICATIONS

ABSOLUTE MAXIMUM RATINGS (Ta = 25 °C)

Parameter	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	1500	V
Collector-Emitter Voltage	V_{CEO}	600	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	I_C	6.0	A
Collector Peak Current	$I_{C(peak)}$	10	A
Total Dissipation at	P_{tot}	50	W
Max. Operating Junction Temperature	T_j	150	°C
Storage Temperature	T_{stg}	-55~150	°C



ELECTRICAL CHARACTERISTICS (Ta = 25 °C)

Parameter	Symbol	Test Conditions	Min.	Typ.	Max.	Unit
Collector Cutoff Current	I_{CBO}	$V_{CB}=1500V, I_E=0$	—	—	1.0	mA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=5.0V, I_C=0$	67	—	200	mA
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_C=400mA, I_B=0$	5	—	—	V
DC Current Gain	$h_{FE(1)}$	$V_{CE}=5.0V, I_C=1.0A$	8	—	25	
	$h_{FE(2)}$	$V_{CE}=5.0V, I_C=4.0A$	5	—	9	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=4.0A, I_B=0.8A$	—	—	5.0	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=4.0A, I_B=0.8A$	—	1.05	1.3	V
Forward Voltage (Damper Diode)	V_F	$I_F=6.0A$	—	1.6	2.0	V
Collector Output Capacitance	C_{ob}	$V_{CB}=10V, f=1.0MHz, I_E=0$	—	95	—	pF